# **SEARCH REQUEST FORM**

## Scientific and Technical Inf rmation Center

| Art Unit: 16 2 Phone Nu<br>Mail Box and Bldg/Room Location:   | mber 30 <u>8 45 Y 9</u><br>Cm <u>'7 A07</u> Result<br>7 E1 Z                       | s Format Preferred (circle                                     | PAPER DISK E-MAIL  |
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| If more than one search is submit   | ted, please prioritize   |  | eed.<br>********   |
| Please provide a detailed statement of the se<br>Include the elected species or structures, key<br>utility of the invention. Define any terms th<br>known. Please attach a copy of the cover sho  | words, synonyms, acrony<br>at may have a special mea                               | ms, and registry numbers, and<br>ning. Give examples or releva | combine with the concept or  |
| Title of Invention: July  | 1417 - 13. f   | him for them   | general is   |
| inventors (please provide full names):  | Scott Mil  | restal   | ·  |
|   |  |  | <u> </u>   |
|   | 12) 1997   | <del>-</del>   | <u></u>  |
| *For Sequence Searches Only* Please include appropriate serial number.  | all pertinent information (po  | rent, child, divisional, or issued                             | patent numbers) along with the   |
|   | J 1917   | BI   | Jan Delaval Reference, Librarian stechnology & Chemical Library CM1 1E07 = 703-308-4498  |
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| Searcher Location:  | Bibliographic  | Dr.Link  | <u> </u>   |
| Date Searcher Picked Up: 5/2/01  Date Completed: 5/2/01   | Litigation   | Lexis/Nexis  | STATE OF THE STATE |
| Searcher Prep & Review Time:  | Fulltext   | Sequence Systems   | e de la constante de la consta |
| Clerical Prep Time: 25  | Patent Family  | WWW/Internet   | <b>2</b> · • · · · · · · · · · · · · · · · · ·   |
| Online Time: + 80   | Other  | Other (specify)  | Significance of the state of th |

PTO-1590 (8-01)

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L1

Jan Delaval

Reference Librarian

Biotechnology & Chemical Library

CM1 1E07 – 703-308-4498

ian.delaval@uspto.gov

(FILE 'HOME' ENTERED AT 09:24:44 ON 02 MAY 2002)
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FILE 'REGISTRY' ENTERED AT 09:25:11 ON 02 MAY 2002

62 S C22H23N3O2/MF AND 46.150.18/RID AND NC5/ES AND 3/NR

L2 9 S L1 AND UREA

L3 2 S L2 AND DIMETHYLETHYL PHENYL

SEL RN

L4 0 S E1-E2/CRN

FILE 'HCAOLD' ENTERED AT 09:26:26 ON 02 MAY 2002

L5 0 S L3

FILE 'HCAPLUS' ENTERED AT 09:26:32 ON 02 MAY 2002

L6 1 S L3

FILE 'USPATFULL, USPAT2' ENTERED AT 09:26:36 ON 02 MAY 2002

L7 0 S L3

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FILE 'REGISTRY' ENTERED AT 09:42:38 ON 02 MAY 2002

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Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:

http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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L3 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS

RN 228399-53-9 REGISTRY

CN Urea, N-[3-(1,1-dimethylethyl)phenyl]-N'-[3-(4-pyridinyloxy)phenyl](9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C22 H23 N3 O2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

N O NH-C-NH- Bu-t

<sup>\*\*</sup>PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:58658

L3 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2002 ACS

RN 228399-50-6 REGISTRY

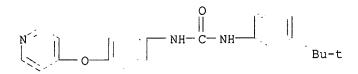
CN Urea, N-[3-(1,1-dimethylethyl)phenyl]-N'-[4-(4-pyridinyloxy)phenyl](9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C22 H23 N3 O2

SR CF

LC STN Files: CA, CAPLUS, TOXCENTER



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:58658

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FILE COVERS 1907 - 2 May 2002 VOL 136 ISS 18 FILE LAST UPDATED: 30 Apr 2002 (20020430/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d all 16

L6 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS

```
1999:421642 HCAPLUS
AN
     131:58658
DN
     Inhibition of raf kinase using symmetrical and unsymmetrical substituted
ΤI
     diphenyl ureas
     Miller, Scott; Osterhout, Martin; Dumas, Jacques; Khire, Uday; Lowinger,
IN
     Timothy Bruno; Riedl, Bernd; Scott, William J.; Smith, Roger A.; Wood,
     Jill E.; Gunn, David; Rodriguez, Mareli; Wang, Ming
PA
     Bayer Corporation, USA
SO
     PCT Int. Appl., 89 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM C07C275-24
     ICS C07D213-02; C07D333-02; A61K031-17; A61K031-38; A61K031-44
CC
     25-21 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
     Section cross-reference(s): 1, 7
FAN.CNT 1
     PATENT NO.
                        KIND DATE
                                               APPLICATION NO.
                                                                  DATE
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                              _____
                              19990701
                                               WO 1998-US26081 19981222
PΙ
     WO 9932436
                        A1
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
              DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
              MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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              CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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                                               EP 1998-963809
                                                                 19981222
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              IE, SI, LT, LV, FI, RO
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     WO 1998-US26081
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     MARPAT 131:58658
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AB The invention relates to the use of a group of aryl ureas ANHCONHB [I; A = certain (un)substituted Ph, pyridinyl, or thien-2-yl groups; B = certain (un)substituted mono- to tricyclic aryl or heteroaryl groups] in treating raf-mediated diseases, and pharmaceutical compns. for use in such therapy. A subset of I are novel and are claimed per se. Approx. 160 invention compds. and numerous intermediates were prepd. For instance, reaction of tolyl isocyanate with 2-methoxy-5-(trifluoromethanesulfonyl)aniline in EtOAc gave title compd. II. In an in vitro raf kinase assay, all compds.

II

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displayed IC50 values between 1 nM and 10 .mu.M.
ST
     diphenyl urea prepn raf kinase inhibitor; aryl urea prepn antitumor agent
IT
     Antitumor agents
        (Inhibition of raf kinase using sym. and unsym. substituted di-Ph
        ureas)
ΙT
     Phosphoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); MSC
     (Miscellaneous); BIOL (Biological study); PROC (Process)
        (gene c-raf; Inhibition of raf kinase using sym. and unsym. substituted
        di-Ph ureas)
ΙT
     726-17-0P
                 780-90-5P
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                                          883-62-5P
                                                       885-87-0P
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    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; prepn. of sym. and unsym. substituted di-Ph ureas with
        inhibitory effects on tumors mediated by raf kinase)
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     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
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(prepn. of sym. and unsym. substituted di-Ph ureas with inhibitory effects on tumors mediated by raf kinase) 144378-33-6, Raf Kinase ΙT RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process) (prepn. of sym. and unsym. substituted di-Ph ureas with inhibitory effects on tumors mediated by raf kinase) 86-84-0, 1-Naphthyl isocyanate 100-11-8, 4-Nitrobenzyl bromide ΙT 100-15-2, N-Methyl-4-nitroaniline 100-51-6, Benzyl alcohol, reactions 101-77-9 106-44-5, reactions 106-49-0, p-Toluidine, reactions 108-30-5, reactions 109-00-2, 3-Hydroxypyridine 110-91-8, Morpholine, reactions 123-30-8, 4-Aminophenol 150-76-5, 4-Methoxyphenol 320-94-5, 2-Nitro-4-288-32-4, Imidazole, reactions (trifluoromethyl)benzoic acid 327-78-6, 4-Chloro-3-(trifluoromethyl)phenyl isocyanate 349-65-5, 2-Methoxy-5-(trifluoromethyl)aniline 350-46-9, 1-Fluoro-4-nitrobenzene 358-23-6, Trifluoromethanesulfonic anhydride 371-40-4, 4-Fluoroaniline 400 - 74 - 8, 2-Fluoro-5-nitrobenzotrifluoride 452-80-2, 2-Fluoro-4-methylaniline 453-20-3, 3-Hydroxytetrahydrofuran 498-74-8, 4-Methoxymetanilyl fluoride 585-79-5, 1-Bromo-3-nitrobenzene 620-95-1, 551-06-4 585-34-2 622-58-2, p-Tolyl isocyanate 624-28-2, 3-Benzylpyridine 626-61-9, 4-Chloropyridine 768-35-4 2,5-Dibromopyridine 872-31-1, 3-Bromothiophene 883-99-8 1083-48-3, 4-(4-Nitrobenzyl)pyridine 1121-78-4, 5-Hydroxy-2-methylpyridine 1849-36-1 2033-89-8, 3,4-Dimethoxyphenol 2103-88-0, 2-Mercapto-4-phenylthiazole 3279-07-0, 4-tert-Butyl-2-nitrophenol 3535-88-4, 5-tert-Butyl-2-methoxyaniline 4548-45-2, 2-Chloro-5-nitropyridine 4556-23-4, 4-Mercaptopyridine 4595-59-9, 5-Bromopyrimidine 6310-19-6, 4-tert-Butyl-2-nitroaniline 6358-07-2 7379-35-3, 4-Chloropyridine 21101-60-0, 4-(4-Nitrophenylthio)phenol 22948-02-3, hydrochloride 24424-99-5, Di-tert-butyl dicarbonate 25267-27-0, 3-Aminothiophenol 29264-35-5 36265-31-3 73322-01-7, 4-(2-Pyridinylthio)-1-Iodobutane 198077-72-4, 2-Methoxy-5-(difluoromethanesulfonyl)aniline nitrobenzene 228401-47-6, 2,4-Dimethoxy-5-(trifluoromethyl)aniline 228401-48-7, 2-Hydroxy-5-(trifluoromethylthio)aniline RL: RCT (Reactant); RACT (Reactant or reagent) (reactant; prepn. of sym. and unsym. substituted di-Ph ureas with inhibitory effects on tumors mediated by raf kinase) THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT RF. (1) Dixon; US 5470882 A 1995 HCAPLUS

- (2) Seto; US 5429918 A 1995 HCAPLUS
- (3) Smithkline Beecham Corporation; WO 96/25157 A1 1996 HCAPLUS

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TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

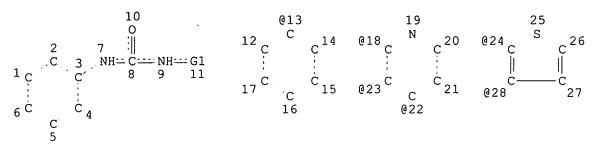
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Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS

Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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VAR G1=13/18/23/22/24/28 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

23426 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 75223 ITERATIONS 23426 ANSWERS

SEARCH TIME: 00.00.06

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(FILE 'HOME' ENTERED AT 10:57:31 ON 02 MAY 2002) SET COST OFF

FILE 'REGISTRY' ENTERED AT 10:57:51 ON 02 MAY 2002 ACT KUMAR776/A

L1STR

L2 23426 SEA FILE=REGISTRY SSS FUL L1

L3 2 S L2 AND C22H23N3O2/MF

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23424 S L2 NOT L3 L.4

FILE 'HCAPLUS' ENTERED AT 10:58:50 ON 02 MAY 2002 8315 S L4 L5

FILE 'REGISTRY' ENTERED AT 11:00:54 ON 02 MAY 2002 1.6 1 S 144378-33-6

FILE 'HCAPLUS' ENTERED AT 11:01:43 ON 02 MAY 2002

297 S L6 L7

L8 546 S RAF KINASE OR C RAF KINASE OR PROTEIN KINASE C RAF OR GENE C

17 S KINASE PHOSPHORYLATING GENE C RAF PROTEIN L9

L10 574 S L7-L9

L11 7 S L5 AND L10

FILE 'REGISTRY' ENTERED AT 11:03:31 ON 02 MAY 2002

11 S (L8 OR L9) NOT L6 L12

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FILE 'HCAPLUS' ENTERED AT 11:04:15 ON 02 MAY 2002
L13
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L14
               1 S L5 AND L13
L15
               7 S L11, L14
L16
           6950 S L5 AND (PY<=1997 OR PRY<=1997 OR AY<=1997)
L17
               5 S L15 AND L16
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            197 S E3, E4 AND L5
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FILE 'REGISTRY' ENTERED AT 11:14:47 ON 02 MAY 2002

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FILE COVERS 1907 - 2 May 2002 VOL 136 ISS 18 FILE LAST UPDATED: 30 Apr 2002 (20020430/ED)

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#### => d 145 bib abs hitrn tot

L45 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:111513 HCAPLUS

DN 134:163040

TI Preparation of heteroaryl aryl ureas as raf kinase inhibitors

IN Wood, Jill E.; Wild, Hanno; Rogers, Daniel H.; Lyons, John;
Katz, Michael; Caringal, Yolanda; Dally, Robert; Lee, Wendy; Smith,
Roger A.; Blum, Cheri

PA Onyx Pharmaceuticals, USA; Bayer Corporation

SO U.S., 30 pp. CODEN: USXXAM

DT Patent

LA English

FAN CNT 1

| FAN.C | PATENT NO.      | KIND | DATE     |   | APPLICATION NO. | DATE       |
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| PRAI  | US 1997-126420P | P    | 19970523 | < |                 |            |
|       | US 1998-83399   | A3   | 19980522 |   |                 |            |
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$$HN$$
 $O$ 
 $i-Pr$ 
 $S$ 
 $CO_2Me$ 
 $I$ 

AB The title heteroaryl aryl ureas, useful in treating tumors mediated by

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raf kinase (no data), were prepd. E.g., a multi-step
      synthesis of the urea I was given. The title compds. such as I are
      effective at 0.01-200 mg/kg/day.
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      216573-01-2P
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          (prepn. of heteroaryl aryl ureas as raf kinase
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      144378-33-6, RAF kinase
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          (prepn. of heteroaryl aryl ureas as raf kinase
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                 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
        36
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     ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2002 ACS
T.45
      1999:425740 HCAPLUS
AN
DN
      131:73648
ΤI
      Inhibition of raf kinase using substituted
      heterocyclic ureas
ΙN
      Dumas, Jacques; Khire, Uday; Lowinger, Timothy
      Bruno; Paulsen, Holger; Riedl, Bernd; Scott, William
      J.; Smith, Roger A.; Wood, Jill E.;
      Hatoum-Mokdad, Holia; Johnson, Jeffrey; Lee, Wendy; Redman, Aniko
PΑ
      Bayer Corporation, USA
      PCT Int. Appl., 163 pp.
      CODEN: PIXXD2
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      Patent
      English
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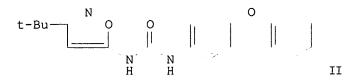
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JP 2001526220

T2

20011218

NO 2000003232 A 20000821 NO 2000-3232 20000621 <-PRAI US 1997-996343 A 19971222 <-WO 1998-US26078 W 19981222
OS MARPAT 131:73648
GI



AB A method for treatment of cancerous cell growth mediated by raf kinase comprises administration of urea derivs. ANHCONHB [I; A = substituted isoxazolyl, thienyl, thiadiazolyl, furyl, pyrazolyl, etc.; B = (substituted) mono-, di-, or tricyclic aryl, heteroaryl contg. .gtoreq.l 5-6 membered arom. structure contg. 0-4 N, O, or S atoms]. Reaction of 4-phenyloxyphenyl isocyanate with 5-amino-3-tert-butylisoxazole in methylene chloride and heating at reflux temp. for 2 days gave title compd. II. In an in vitro raf kinase assay, I displayed IC50 values of 1-10 .mu.M.

IT 229003-12-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(intermediate; prepn. of substituted heterocyclic ureas for treatment of cancerous cell growth mediated by raf kinase)

IT 229002-65-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of substituted heterocyclic ureas for treatment of cancerous cell growth mediated by raf kinase)

IT 227623-30-5P 229002-62-4P 229002-63-5P

229002-66-8P 229002-67-9P 229002-70-4P

229002-72-6P 229002-74-8P 229002-75-9P

229002-76-0P 229002-93-1P 229002-95-3P

229002-96-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of substituted heterocyclic ureas for treatment of cancerous cell growth mediated by raf kinase)

IT 144378-33-6, Raf kinase

RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)

(prepn. of substituted heterocyclic ureas for treatment of cancerous cell growth mediated by raf kinase)

IT 229003-21-8

RL: RCT (Reactant); RACT (Reactant or reagent)

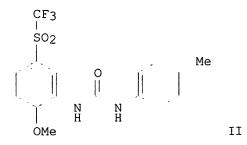
(reactant; prepn. of substituted heterocyclic ureas for treatment of cancerous cell growth mediated by raf kinase)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2002 ACS

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1999:421660 HCAPLUS
ΑN
DN
     131:44811
     Preparation of aryl- and heteroaryl-substituted heterocyclic ureas as
TΙ
     raf kinase inhibitors
     Dumas, Jacques; Khire, Uday; Lowinger, Timothy
IN
     Bruno; Paulsen, Holger; Riedl, Bernd; Scott, William
     J.; Smith, Roger A.; Wood, Jill E.;
     Hatoum-Mokdad, Holia; Johnson, Jeffrey; Redman, Aniko; Sibley, Robert
     Bayer Corporation, USA
PA
     PCT Int. Appl., 58 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
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PRAI US 1997-996181
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OS
     MARPAT 131:44811
     The title compds. ANHCONHB (A = heteroaryl; B = aryl, heteroaryl),
AΒ
     raf kinase inhibitors, were prepd. E.g.,
     N-(1-phenyl-3-tert-butyl-5-pyrazolyl)-N'-(4-(4-pyridinylmethyl)phenyl)urea
     was prepd.
     227623-25-8P 227623-30-5P 227623-31-6P
IT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
         (prepn. of aryl- and heteroaryl-substituted heterocyclic ureas as
        raf kinase inhibitors)
ΙT
     144378-33-6, Raf kinase
     RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
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         (prepn. of aryl- and heteroaryl-substituted heterocyclic ureas as
        raf kinase inhibitors)
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     ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2002 ACS
ΑN
     1999:421642 HCAPLUS
DN
     131:58658
ΤI
     Inhibition of raf kinase using symmetrical and
     unsymmetrical substituted diphenyl ureas
     Miller, Scott; Osterhout, Martin; Dumas,
ΙN
     Jacques; Khire, Uday; Lowinger, Timothy Bruno;
     Riedl, Bernd; Scott, William J.; Smith, Roger A.
     ; Wood, Jill E.; Gunn, David; Rodriguez,
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Mareli; Wang, Ming
PA
    Bayer Corporation, USA
SO
    PCT Int. Appl., 89 pp.
    CODEN: PIXXD2
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    Patent
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    English
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GΙ
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The invention relates to the use of a group of aryl ureas ANHCONHB [I; A = certain (un)substituted Ph, pyridinyl, or thien-2-yl groups; B = certain (un)substituted mono- to tricyclic aryl or heteroaryl groups] in treating raf-mediated diseases, and pharmaceutical compns. for use in such therapy. A subset of I are novel and are claimed per se. Approx. 160 invention compds. and numerous intermediates were prepd. For instance, reaction of tolyl isocyanate with 2-methoxy-5-(trifluoromethanesulfonyl)aniline in EtOAc gave title compd. II. In an in vitro raf kinase assay, all compds. displayed IC50 values between 1 nM and 10 .mu.M.

IT 370-50-3P 228399-32-4P 228399-33-5P

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        (prepn. of sym. and unsym. substituted di-Ph ureas with inhibitory
        effects on tumors mediated by raf kinase)
     144378-33-6, Raf Kinase
     RL: BPR (Biological process); BSU (Biological study, unclassified); MSC
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RE.CNT 3
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     1998:776672 HCAPLUS
     130:38284
     Preparation of urea derivatives as raf kinase
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    Wood, Jill E.; Wild, Hanno; Rogers, Daniel H.; Lyons, John;
     Katz, Michael E.; Caringal, Yolanda V.; Dally, Robert; Lee, Wendy;
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TΤ

L45 AN

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IN

Smith, Roger A.; Blum, Cheri L.

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Bayer Corp., USA; Onyx Pharmaceuticals; et al.
PΑ
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    PCT Int. Appl., 53 pp.
    CODEN: PIXXD2
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            NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
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    EP 986382
                      Α1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
                      Т2
    JP 2002500650
                           20020108
                                          JP 1998-550618
                                                           19980521 <--
                      A2
                           19970523 <--
PRAI US 1997-863021
    WO 1998-US10376 W
                           19980521
    Substituted urea compds., useful for treating tumors mediated by
AΒ
    raf kinase (no data), were prepd. E.g., reaction of Me
    thioglycolate and 3-chloro-4-methyl-2-pentenenitrile gave 16% of the
    3-aminothiophene deriv., which was reacted with 4-MeC6H4NCO to give Me
    5-isopropyl-3-(3-p-tolylureido)thiophene-2-carboxylate.
IT
    216573-01-2P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
     (Reactant or reagent); USES (Uses)
        (prepn. of urea derivs. as raf kinase inhibitors)
    216573-03-4P 216573-34-1P 216574-09-3P
IT
    216574-10-6P 216574-11-7P 216589-05-8P
    216589-46-7P 216852-73-2P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
    BIOL (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of urea derivs. as raf kinase inhibitors)
ΙT
    149719-32-4, v-Raf kinase
    RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
     (Biological study)
        (prepn. of urea derivs. as raf kinase inhibitors)
IT
    216591-27-4P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (prepn. of urea derivs. as raf kinase inhibitors)
             THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> d 146 bib abs hitrn tot
    ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS
1.46
AN
    2001:746592 HCAPLUS
DN
    136:95577
ΤI
    Discovery of heterocyclic ureas as a new class of raf
    kinase inhibitors: identification of a second generation lead by a
    combinatorial chemistry approach
ΑU
    Smith, R. A.; Barbosa, J.; Blum, C. L.; Bobko, M. A.; Caringal,
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Y. V.; Dally, R.; Johnson, J. S.; Katz, M. E.; Kennure, N.; Kingery-Wood,
     J.; Lee, W.; Lowinger, T. B.; Lyons, J.; Marsh, V.; Rogers, D.
     H.; Swartz, S.; Walling, T.; Wild, H.
     Department of Chemistry Research, Bayer Research Center, West
     Haven, CT, 06516, USA
     Bioorganic & Medicinal Chemistry Letters (2001), 11(20), 2775-2778
     CODEN: BMCLE8; ISSN: 0960-894X
     Elsevier Science Ltd.
     Journal
     English
     Heterocyclic ureas, such as N-3-thienyl N'-aryl ureas, have been
     identified as novel inhibitors of raf kinase, a key
     mediator in the ras signal transduction pathway. Structure-activity
     relationships were established, and the potency of the screening hit was
     improved 10-fold to IC50=1.7 .mu.M. A combinatorial synthesis approach
     enabled the identification of a breakthrough lead (IC50=0.54 .mu.M) for a
     second generation series of heterocyclic urea raf kinase
     inhibitors.
     144378-33-6, Raf kinase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (heterocyclic ureas as raf kinase inhibitors)
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     216573-09-0P 216573-13-6P 216573-17-0P
     216573-24-9P 216573-25-0P 216573-26-1P
     216573-27-2P 216573-34-1P 216574-41-3P
     216574-53-7P 216589-05-8P 216589-46-7P
     216591-27-4P 229003-21-8P 329260-25-5P
     329260-39-1P 329260-45-9P 329260-47-1P
     329260-78-8P 329260-80-2P 329260-82-4P
     329260-84-6P 371974-26-4P 389069-17-4P
     389069-18-5P 389069-19-6P 389069-20-9P
     389069-21-0P 389069-22-1P 389070-11-5P
     389070-12-6P 389070-13-7P 389070-14-8P
     389070-15-9P 389070-21-7P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (heterocyclic ureas as raf kinase inhibitors)
              THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
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              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L46
     ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS
     2000:493516 HCAPLUS
     133:120157
     Preparation of .omega.-carboxy(hetero)aryl substituted diphenyl ureas as
     raf kinase inhibitors
     Riedl, Bernd; Dumas, Jacques; Khire, Uday;
     Lowinger, Timothy B.; Scott, William J.; Smith,
     Roger A.; Wood, Jill E.; Monahan, Mary-Katherine; Natero,
     Reina; Renick, Joel; Sibley, Robert N.
     Bayer Corporation, USA
     PCT Int. Appl., 120 pp.
     CODEN: PIXXD2
     Patent
     English
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                             APPLICATION NO.
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                                           WO 2000-US648
     WO 2000042012
                      A1
                             20000720
                                                               20000112
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         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI,
                     CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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                             20011010
                                            EP 2000-903239
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             IE, SI, LT, LV, FI, RO
     US 2001011135
                             20010802
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                       A1
                                                              20010202
     US 2001011136
                       A1
                             20010802
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                                            US 2001-773672
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     US 2001016659
                       Α1
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     US 2001027202
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                                                              20010910
     US 2002042517
PRAI US 1999-115877P
                       Ρ
                             19990113
                       A2
                             19990225
     US 1999-257266
                       A2
                             19991022
     US 1999-425228
                       W
                             20000112
     WO 2000-US648
     MARPAT 133:120157
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AB This invention relates to the prepn. and use of (hetero)aryl ureas ANHCONHB [I; A = L(ML1)q; L = 5- or 6-membered (hetero)aryl, esp. Ph or pyridinyl; M = bridging group; Ll = (hetero)aryl with at least one (un)substituted sulfamoyl, carboxy, or carbamoyl substituent; q = 1-3; B = certain (un)substituted mono- to tricyclic aryl or heteroaryl groups] for the treatment of raf mediated diseases, such as cancer (no data). Approx. 100 invention compds. and numerous intermediates were prepd. For instance, 3-tert-butylaniline was coupled with bis(trichloromethyl)carbonate to form the isocyanate, followed by addn. of 4-(3-N-methylcarbamoylphenoxy)aniline (prepn. given) to afford the urea II.

284461-33-2P, N-(3-tert-Butylphenyl)-N'-(4-(3-(N-ΙT methylcarbamoyl)phenoxy)phenyl)urea 284461-34-3P, N-(3-tert-Butylphenyl)-N'-(4-(4-acetylphenoxy)phenyl)urea 284461-36-5P, N-(5-tert-Butyl-2-methoxyphenyl)-N'-[4-[3-(Nmethylcarbamoyl)phenoxy]phenyl]urea 284461-37-6P, N-(5-tert-Butyl-2-methoxyphenyl)-N'-[4-[4-methoxy-3-(N-methox)-3-(Nmethylcarbamoyl)phenoxy]phenyl]urea 284461-39-8P, N-(5-tert-Butyl-2-methoxyphenyl)-N'-[4-(1-oxoisoindolin-5-methoxyphenyl)]yloxy)phenyl]urea 284461-42-3P 284461-43-4P, N-[2-Methoxy-5-(trifluoromethyl)phenyl]-N'-[3-(2-carbamoyl-4pyridyloxy)phenyl]urea 284461-44-5P 284461-45-6P, N-[2-Methoxy-5-(trifluoromethyl)phenyl]-N'-[4-(2-carbamoyl-4-influoromethyl)phenyl-4-influoromethyl]-N'-[4-(2-carbamoyl-4-influoromethyl)phenyl-4-influoromethyl]-N'-[4-(2-carbamoyl-4-influoromethyl]-N'-[4-(2-carbamoyl-4-influoromethyl]-N'-[4-(2-carbamoyl-4-influoromethyl]-N'-[4-(2-carbamoyl-4-influoromethyl]-N'-[4-(2-carbamoyl-4-influoromethyl]-N'-[4-(2-carbamoyl-4-influoromethyl]-N'-[4-(2-carbamoyl-4-influoromethyl]-N'-[4-(2-carbamoyl-4-influoromethyl]-N'-[4-(2-carbamoyl-4-influoromethyl]-N'-[4-(2-carbamoyl-4-influoromethyl]-N'-[4-(2-carbamopyridyloxy)phenyl]urea 284461-51-4P 284461-54-7P **284461-58-1P**, N-[2-Methoxy-5-(trifluoromethyl)phenyl]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[4-(N-1)]]-N'-[4-(N-1)]-N'-[4methylcarbamoyl)-4-pyridyl]thio]phenyl]urea 284461-74-1P, N-[4-Chloro-3-(trifluoromethyl)phenyl]-N'-[4-(2-carbamoyl-4pyridyloxy)phenyl]urea 284461-75-2P, N-[4-Chloro-3-(trifluoromethyl)phenyl]-N'-[3-(2-carbamoyl-4-pyridyloxy)phenyl]urea 284461-78-5P 284461-86-5P 284461-90-1P

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284461-99-0P 284462-05-1P 284462-06-2P
           284462-17-5P 284462-18-6P 284462-19-7P,
           N-[4-Bromo-3-(trifluoromethyl)phenyl]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-chloro-4-[[2-(N-multiple)phenyl]]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multiple)phenyl]-N'-[2-(N-multi
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           N-[4-Bromo-3-(trifluoromethyl)phenyl]-N'-[3-[[2-(N-methylcarbamoyl)-4-
           pyridyl]oxy]phenyl]urea 284462-26-6P 284462-28-8P,
           N-[2-Methoxy-4-chloro-5-(trifluoromethyl)phenyl]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[2-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[[4-(N-1)]]-N'-[4-[4-(N-1)]]-N'-[4-[4-(N-1)]]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-(N-1)]-N'-[4-
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           study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
            (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
            (Reactant or reagent); USES (Uses)
                   (prepn. of .omega.-carboxy(hetero)aryl substituted di-Ph urea
                  raf kinase inhibitors by reacting arylisocyanates
                  with arylamines)
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           284462-32-4P 284462-33-5P 284462-34-6P
           284462-36-8P
           RL: BAC (Biological activity or effector, except adverse); BSU (Biological
           study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
           BIOL (Biological study); PREP (Preparation); USES (Uses)
                   (prepn. of .omega.-carboxy(hetero)aryl substituted di-Ph urea
                  raf kinase inhibitors by reacting arylisocyanates
                  with arylamines)
           284461-38-7, N-(5-tert-Butyl-2-methoxyphenyl)-N'-[4-(1,3-
IT
           dioxoisoindolin-5-yloxy)phenyl]urea 284461-48-9
           284461-76-3, N-[4-Chloro-3-(trifluoromethyl)phenyl]-N'-(3-((2-(N-1)phenyl)phenyl))
           Methylcarbamoyl)-4-pyridyl)oxy)phenyl)urea 284462-29-9
           284462-76-6 284671-00-7, N-[5-(Trifluoromethyl)-2-
           methoxyphenyl]-N'-[4-[3-(5-methoxycarbonylpyridyl)oxy]phenyl]urea
           284671-01-8, N-[5-(Trifluoromethyl)-2-methoxyphenyl]-N'-(3-)
           carboxyphenyl)urea
           RL: RCT (Reactant); RACT (Reactant or reagent)
                   (prepn. of .omega.-carboxy(hetero)aryl substituted di-Ph urea
                   raf kinase inhibitors by reacting arylisocyanates
                   with arylamines)
           284461-73-0P 284461-89-8P 284462-67-5P,
ΙT
           N-[4-Chloro-3-(trifluoromethyl)phenyl]-N'(4-aminophenyl)Urea
            284462-68-6P, N-[4-Chloro-3-(trifluoromethyl)phenyl]-N'(4-
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kumar - 09 / 776936 ethoxycarbonylphenyl)Urea 284462-69-7P 284462-70-0P 284462-71-1P 284462-97-1P 284670-98-0P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of .omega.-carboxy(hetero)aryl substituted di-Ph urea raf kinase inhibitors by reacting arylisocyanates with arylamines) RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT => fil reg FILE 'REGISTRY' ENTERED AT 11:16:56 ON 02 MAY 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS) STRUCTURE FILE UPDATES: 30 APR 2002 HIGHEST RN 409303-45-3 DICTIONARY FILE UPDATES: 30 APR 2002 HIGHEST RN 409303-45-3 TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001 Please note that search-term pricing does apply when conducting SmartSELECT searches. Crossover limits have been increased. See HELP CROSSOVER for details. Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf (FILE 'HCAPLUS' ENTERED AT 11:04:15 ON 02 MAY 2002) FILE 'REGISTRY' ENTERED AT 11:14:47 ON 02 MAY 2002 FILE 'HCAPLUS' ENTERED AT 11:15:08 ON 02 MAY 2002 SEL HIT RN L44

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332 S E1-E332 L47

2 S L47 AND L6, L12 L48

330 S L47 NOT L48 1.49

FILE 'REGISTRY' ENTERED AT 11:16:56 ON 02 MAY 2002

=> d ide can tot 148

L48 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS

149719-32-4 REGISTRY RN

CN Kinase (phosphorylating), gene v-raf protein (9CI) (CA INDEX NAME) OTHER NAMES:

Gene v-raf kinase CN

Gene v-raf serine-threonine protein kinase CN

CN v-Raf kinase

CN v-Raf serine/threonine kinase

MF Unspecified

CI MAN

SR

LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER

#### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

- 10 REFERENCES IN FILE CA (1967 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 11 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:41379

REFERENCE 2: 130:38284

REFERENCE 3: 126:262519

REFERENCE 4: 126:142645

REFERENCE 5: 124:6073

REFERENCE 6: 122:6851

REFERENCE 7: 121:131197

REFERENCE 8: 119:244070

REFERENCE 9: 119:154375

REFERENCE 10: 119:153266

L48 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2002 ACS

RN **144378-33-6** REGISTRY

CN Kinase (phosphorylating), gene c-raf protein (9CI) (CA INDEX NAME) OTHER NAMES:

CN C-raf kinase

CN Gene c-Raf protein kinase

CN Gene raf serine/threonine kinase

CN Protein kinase c-Raf

CN Raf kinase

MF Unspecified

CI MAN

SR CA

LC STN Files: ADISNEWS, BIOBUSINESS, BIOSIS, CA, CAPLUS, CEN, CIN, PROMT, TOXCENTER, USPATFULL

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5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

297 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:279456

REFERENCE 2: 136:277868

REFERENCE 3: 136:277136

REFERENCE 4: 136:260900

REFERENCE 5: 136:260894

REFERENCE 6: 136:258141

REFERENCE 7: 136:226424

REFERENCE 8: 136:214136

REFERENCE 9: 136:213868

REFERENCE 10: 136:200113

=> d scan 149

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS

 $IN \qquad \text{Benzamide, } 3\text{-[4-[[[[4-chloro-3-(trifluoromethyl)phenyl]amino]carbonyl]amin} \\$ 

o]phenoxy]-N-(6-methoxy-3-pyridinyl)- (9CI)

MF C27 H20 C1 F3 N4 O4

MeO. CF3 C1 NH-C-NH-

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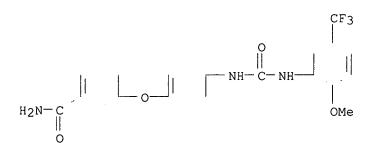
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):25

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN Benzamide, 3-[4-[[[[2-methoxy-5-(trifluoromethyl)phenyl]amino]carbonyl]ami

no]phenoxy]- (9CI)

MF C22 H18 F3 N3 O4



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS

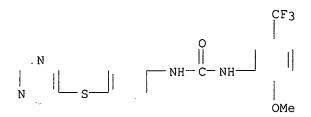
IN Urea, N-(2-methoxy-4-nitrophenyl)-N'-[4-(4-pyridinyloxy)phenyl]- (9CI)

MF C19 H16 N4 O5

REGISTRY COPYRIGHT 2002 ACS L49 330 ANSWERS ΙN

Urea, N-[2-methoxy-5-(trifluoromethyl)phenyl]-N'-[4-(5pyrimidinylthio)phenyl]- (9CI)

C19 H15 F3 N4 O2 S MF



## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

330 ANSWERS REGISTRY COPYRIGHT 2002 ACS L49 Urea, N-[4-(1,3-benzodioxol-5-yloxy)phenyl]-N'-[3-(1,1-yloxy)phenyl]-IN dimethylethyl)phenyl]- (9CI) C24 H24 N2 O4 MF

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

REGISTRY COPYRIGHT 2002 ACS L49 330 ANSWERS

2-Thiophenecarboxylic acid, 3-[[[(4-methylphenyl)amino]carbonyl]amino]-5phenyl-, methyl ester (9CI) C20 H18 N2 O3 S

MF

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Urea, N-(2,3-dichlorophenyl)-N'-[5-(1,1-dimethylethyl)-2-thienyl]- (9CI)
MF C15 H16 C12 N2 O S

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS

MF C20 H14 C1 F3 N4 O2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Urea, N-[2-methoxy-5-(trifluoromethyl)phenyl]-N'-[4-[(4-pyridinylthio)methyl]phenyl]- (9CI)
MF C21 H18 F3 N3 O2 S

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN Urea, N-[2-(aminomethyl)-5-(1,1-dimethylethyl)-3-thienyl]-N'-(4methylphenyl)- (9CI)

MF C17 H23 N3 O S

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 3-Pyridinecarboxamide, N-[2-(dimethylamino)ethyl]-5-[4-[[[[2-methoxy-5-(trifluoromethyl)phenyl]amino]carbonyl]amino]phenoxy]- (9CI)
MF C25 H26 F3 N5 O4

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Urea, N-[2,4-dimethoxy-5-(trifluoromethyl)phenyl]-N'-(4-methylphenyl)(9CI)
MF C17 H17 F3 N2 O3

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Urea, N-[4-chloro-3-(trifluoromethyl)phenyl]-N'-[4-[(6-methyl-3-pyridinyl)oxy]phenyl]- (9CI)
MF C20 H15 C1 F3 N3 O2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

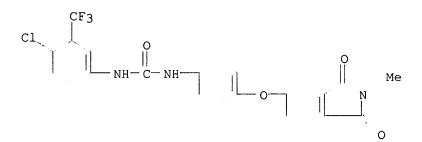
L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2-Thiophenecarboxylic acid, 3-[[((3-chlorophenyl)amino]carbonyl]amino]-5(1,1-dimethylethyl)-, methyl ester (9CI)

MF C17 H19 C1 N2 O3 S

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Urea, N-[4-chloro-3-(trifluoromethyl)phenyl]-N'-[4-[(2,3-dihydro-2-methyl1,3-dioxo-1H-isoindol-5-yl)oxy]phenyl]- (9CI)
MF C23 H15 C1 F3 N3 O4



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN Urea, N-[6-(4-acetylphenoxy)-3-pyridinyl]-N'-[2-methoxy-5-

(trifluoromethyl)phenyl]- (9CI)

MF C22 H18 F3 N3 O4

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Urea, N-(3-methoxy-2-naphthalenyl)-N'-[4-(3-pyridinylmethyl)phenyl]- (9CI)
MF C24 H21 N3 O2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

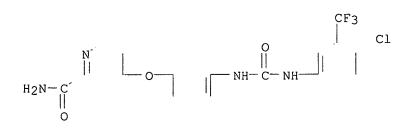
L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Urea, N-[6-(3,4-dichlorophenoxy)-3-pyridinyl]-N'-[2-methoxy-5-(trifluoromethyl)phenyl]- (9CI)
MF C20 H14 C12 F3 N3 O3

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Urea, N-[5-(1,1-dimethylethyl)-2-methoxyphenyl]-N'-[4-(4-pyridinylthio)phenyl]- (9CI)
MF C23 H25 N3 O2 S

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Benzamide, 4,4'-[carbonylbis(imino-4,1-phenyleneoxy)]bis[N-methyl- (9CI)
MF C29 H26 N4 O5

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN Urea, N-[3-(1,1-dimethylethyl)phenyl]-N'-[3-[(2-methyl-4-pyridinyl)oxy]phenyl]- (9CI)

MF C23 H25 N3 O2

CI COM

L49 330 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Urea, N-[4-chloro-3-(trifluoromethyl)phenyl]-N'-[3-(4-pyridinylthio)phenyl]- (9CI)
MF C19 H13 C1 F3 N3 O S

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> d his 150-

L51 8301 S L50 L52 6940 S L16 AND L51 L53 1728 S L52 AND (1 OR 63)/SC,SX E ANTITUMOR/CT E E5+ALL L54 303 S L52 AND E4,E3+NT

DITE LUCADIUGE ENMEDED AM 11.20.25 ON

FILE 'HCAPLUS' ENTERED AT 11:38:35 ON 02 MAY 2002 643 S L52 AND (?NEOPLAS? OR ?CANCER? OR ?CARCIN? OR ?TUMOR? OR ?TUM L55 645 S L54, L55 L56 L57 519 S L53 AND L56 L58 134 S L57 AND P/DT L59 91 S L58 AND US/PC L60 44 S L57 AND ?KINASE? L61 19 S L60 AND L58 L62 1033 S L50 (L) THU/RL L63 218 S L62 AND L57 L64 97 S L63 AND L58 L65 69 S L64 AND L59 L66 8 S L65 AND L60 L67 19 S L61, L66

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FILE COVERS 1907 - 2 May 2002 VOL 136 ISS 18 FILE LAST UPDATED: 30 Apr 2002 (20020430/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L67 ANSWER 1 OF 19 HCAPLUS COPYRIGHT 2002 ACS
```

- AN 2000:531658 HCAPLUS
- DN 133:144896
- TI Phosphonated agents and their antiangiogenic and **antitumorigenic** use
- IN Collins, Delwood C.; Gagliardi, Antonio R.; Nickel, Peter
- PA University of Kentucky Research Foundation, USA
- SO U.S., 21 pp., Cont.-in-part of U.S. Ser. No. 899,996, abandoned. CODEN: USXXAM
- DT Patent
- LA English

FAN.CNT 2

|      | PAT | TENT NO.    | KIND | DATE     |   | ΑP | PLICATION NO. | DATE     |   |
|------|-----|-------------|------|----------|---|----|---------------|----------|---|
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|      | US  | 6160166     | Α    | 20001212 |   | US | 1999-357925   | 19990721 | < |
| PRAI | US  | 1997-899996 | B2   | 19970724 | < |    |               |          |   |
|      | US  | 1998-121124 | A3   | 19980723 |   |    |               |          |   |

OS MARPAT 133:144896

AB Phosphonic acid agents are synthesized and characterized which are potent inhibitors of angiogenesis, tumorigenesis and metalloproteinase activity. Their method of use for the inhibition of angiogenesis and metalloproteinase and the treatment of tumors is also shown.

IT 145-63-1, Suramin 220239-91-8, NF 069 220239-92-9 220239-95-2, NF 068 220239-96-3, NF 067

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. and pharmaceutical compn. of antiangiogenic and antitumorigenic phosphonic acid agents)

IT 111129-57-8P 220240-18-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and pharmaceutical compn. of antiangiogenic and

antitumorigenic phosphonic acid agents)

IT 145-63-1, Suramin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. and pharmaceutical compn. of antiangiogenic and antitumorigenic phosphonic acid agents)

RN 145-63-1 HCAPLUS

CN 1,3,5-Naphthalenetrisulfonic acid, 8,8'-[carbonylbis[imino-3,1-phenylenecarbonylimino(4-methyl-3,1-phenylene)carbonylimino]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L67 ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:425745 HCAPLUS

DN 131:87909

TI Inhibition of p38 kinase activity using substituted heterocyclic ureas

IN Dumas, Jacques; Khire, Uday; Lowinger, Timothy Bruno; Paulsen, Holger;
Riedl, Bernd; Scott, William J.; Smith, Roger A.; Wood, Jill E.;
Hatoum-Mokdad, Holia; Johnson, Jeffrey; Lee, Wendy; Redman, Aniko

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PA
    Bayer Corporation, USA
SO
    PCT Int. Appl., 126 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
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PRAI US 1997-995750
                      Α
    WO 1998-US26080
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OS
    MARPAT 131:87909
GΙ
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AB A method for treatment of p38-mediated disease other than cancer comprises administration of ANHCONHB [I; A = substituted isoxazolyl, pyrazolyl, thienyl, furyl; B = (substituted) mono-, di-, or tricyclic aryl, heteroaryl contg. .gtoreq.1 5-6 membered arom. structure contg. 0-4 N, O, or S atoms]. Reaction of 4-(4-pyridinylthio)aniline with 3-tert-butyl-5-isoxazolyl isocyanate in toluene gave title compd. II. In an in vitro p38 kinase assay, I displayed IC50 values of 1-10 .mu.M.

## IT 229003-12-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; prepn. of substituted heterocyclic ureas for treatment of p38 kinase-mediated diseases other than cancer)

## IT 229002-65-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of substituted heterocyclic ureas for treatment of p38 kinase-mediated diseases other than cancer)

IT 227623-30-5P 227623-31-6P 229002-62-4P 229002-63-5P 229002-66-8P 229002-67-9P 229002-70-4P 229002-72-6P 229002-74-8P

229002-76-0P 229002-93-1P 229002-95-3P 229002-96-4P 229155-57-1P 229155-58-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of substituted heterocyclic ureas for treatment of p38 kinase-mediated diseases other than cancer)

IT 229003-21-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; prepn. of substituted heterocyclic ureas for treatment of p38 kinase-mediated diseases other than cancer)

IT 229003-12-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; prepn. of substituted heterocyclic ureas for treatment of p38 kinase-mediated diseases other than cancer)

RN 229003-12-7 HCAPLUS

CN 2-Thiophenecarboxylic acid, 5-(1,1-dimethylethyl)-3-[[[[4-(4-pyridinylmethyl)phenyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L67 ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:421667 HCAPLUS

DN 131:58659

TI Preparation of diaryl ureas as inhibitors of p38 kinase.

IN Miller, Scott; Osterhout, Martin; Dumas, Jacques; Khire, Uday; Lowinger, Timothy Bruno; Riedl, Bernd; Scott, William J.; Smith, Roger A.; Wood, Jill E.; Gunn, David; Hatoum-Mokdad, Holia; Rodriguez, Mareli; Sibley, Robert; Wang, Ming

PA Bayer Corporation, USA

SO PCT Int. Appl., 107 pp. CODEN: PIXXD2

DT Patent

LA English

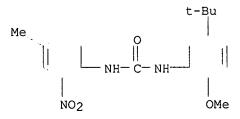
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PATENT NO. KIND DATE APPLICATION NO.

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OS
    MARPAT 131:58659
AB
    A method of treating a p-38 mediated disease other than cancer
    comprises administration of BNHCONHA [A = (substituted) Ph, pyridyl,
     2-thienyl; B = (substituted) aryl, heteroaryl contg. .gtoreq.1 6-membered
    arom. structure contg. 0-4 N, O, or S atoms]. Thus, 5-tert-butyl-2-(3-
     tetrahydrofuranyloxy)aniline (prepn. given) and p-tolyl isocyanate were
     stirred 8 h in PhMe to give 75% N-(5-tert-butyl-2-(3-
     tetrahydrofuranyloxy)phenyl)-N'-(4-methylphenyl)urea. Title compds.
     inhibited p38 kinase with IC50 = 1-10 .mu.M.
IT
     228416-78-2P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
     (Reactant or reagent); USES (Uses)
        (prepn. of diaryl ureas as inhibitors of p38 kinase)
ΙT
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228417-58-1P 228417-59-2P 228417-60-5P

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228418-42-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
   (prepn. of diaryl ureas as inhibitors of p38 kinase)
228399-41-5 228418-48-2 228418-49-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
   (prepn. of diaryl ureas as inhibitors of p38 kinase)
228416-78-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
(Reactant or reagent); USES (Uses)
   (prepn. of diaryl ureas as inhibitors of p38 kinase)
228416-78-2 HCAPLUS
Urea, N-[5-(1,1-dimethylethyl)-2-methoxyphenyl]-N'-(4-methyl-2-
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inhibitors

ΙT

TΤ

RN

CN

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L67 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2002 ACS
AN 1999:166498 HCAPLUS
DN 130:223295
TI Preparation of imidazoquinoxaline protein tyrosine kinase
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nitrophenyl) - (9CI) (CA INDEX NAME)

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Barrish, Joel C.; Chen, Ping; Das, Jagabandhu; Iwanowicz, Edwin J.;
     Norris, Derek J.; Padmanabha, Ramesh; Roberge, Jacques Y.; Schieven, Gary
PA
     Bristol-Myers Squibb Company, USA
     PCT Int. Appl., 315 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
                                                              DATE
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             19980803 <--
     WO 9909845
                            19990304
                                            WO 1998-US16027
ΡI
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             NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA,
             UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                            US 1998-97338
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     US 6235740
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                                            AU 1998-86817
                                                             19980803 <--
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PRAI US 1997-56770P
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     US 1997-69159P
                            19971209
                            19980803
     WO 1998-US16027
                       W
OS
     MARPAT 130:223295
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GΙ

Novel imidazoquinoxalines I and salts thereof are disclosed [wherein: n = 0-4; R1, R2, R3 = H, R6, OH, OR6, SH, SR6, CO2H, SO3H, halo, cyano, NO2, etc.; R1-R3 may form ring(s); R4, R5 = H, R6, COR6; or NR4R5 forms (un)substituted 3- to 8-membered heterocyclic ring; R6 = (un)substituted alk(en/yn)yl, cycloalk(en)yl(alkyl), aryl, aralkyl, heterocyclo(alkyl)]. Also disclosed are pharmaceutical compns. contg. the compds., and methods of their use in the treatment of various protein tyrosine kinase -assocd. disorders, such as immunol. disorders (no data). Over 500 synthetic examples are given. For instance, the

4

nitroimidazoloquinoxalinone II (prepd. in 4 steps) was treated with POC13 to give 78% of the corresponding chloro compd., which reacted with NaN(SiMe3)2 and 2-chloro-6-methylaniline in THF to give 86% title compd. III.

IT 68008-32-2P 221068-10-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (intermediate; prepn. of imidazoquinoxalines as protein tyrosine
 kinase inhibitors)

IT 68008-32-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (intermediate; prepn. of imidazoquinoxalines as protein tyrosine
 kinase inhibitors)

RN 68008-32-2 HCAPLUS

CN Urea, N-[2-(1H-imidazol-1-yl)phenyl]-N'-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L67 ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:96248 HCAPLUS

DN 130:148689

TI Phosphonated agents and their antiangiogenic and **antitumorigenic** use

IN Collins, Delwood C.; Gagliardi, Antonio R.; Nickel, Peter

PA University of Kentucky Research Foundation, USA

SO PCT Int. Appl., 74 pp. CODEN: PIXXD2

CODEN. FIX.

DT Patent

LA English

FAN.CNT 2

| LAN   | PATENT NO. |              |     |                            | KII | ND DATE |               |      |     | APPLICATION NO. |      |      |      |     | DATE  |      |                 |     |
|-------|------------|--------------|-----|----------------------------|-----|---------|---------------|------|-----|-----------------|------|------|------|-----|-------|------|-----------------|-----|
| PI    | WO         | 9905         |     |                            |     |         | 1999          | 0204 |     | W               | 19   | 98-U | S154 | 70  | 1998  | 0724 | <- <del>-</del> |     |
|       |            |              |     | BE,                        |     |         | DE,           | DK,  | ES, | FI,             | FR,  | GB,  | GR,  | ΙE, | IT,   | LU,  | MC,             | NL, |
|       |            |              |     | A1 19990216<br>B2 20011018 |     |         | AU 1998-85915 |      |     |                 |      | 1998 | 0724 | <   |       |      |                 |     |
|       |            | 1019         | 419 |                            | A   | 1       | 2000          | 0719 |     |                 |      |      |      |     | 1998  |      |                 | יים |
| ח ח ח | T 110      |              | IE, | FI                         | ,   |         | ·             | ·    | ·   |                 | GIV, | 11,  | ш.,  | шо, | 1411, | J.,  | mc,             | ΕΙ, |
| PRA   |            | 1997<br>1998 |     |                            |     |         | 1997<br>1998  |      | ζ   | _               |      |      |      |     |       |      |                 |     |

OS MARPAT 130:148689

The present invention relates to novel phosphonic acid substituted agents and their pharmaceutical compns. Phosphonic acid substituted agents that are potent inhibitors of angiogenesis or tumorigenesis is defined by the following formula: (P-Yn1)m1-Q1-K-(Q2-(Yn2-P)m2)j (P = phosphonic group, phosphonic salt; Y = OCO, NR1CO, CON(R1)R2; Q1, Q2 = aryl; K = H, NHCONH, NHCSNH, NHCOR3, NHCSR3CSNH; j, n1, n2 = 0-2; m1, m2 = 1-4; R1 = H, CH2CO2H, alkyl; R2 = alkyl, aryl, alkaryl; R3 = aryl). A

pharmaceutical compn. for the treatment of angiogenesis-dependent conditions or tumors comprises an effective amt. of a phosphonic acid agent and a pharmaceutically acceptable carrier. Some of the phosphonic acid agents were more potent inhibitors of angiogenesis in the chick chorioallantoic membrane (CAM) assay and to human microvascular endothelial cell growth than suramin.

220240-08-4P 220240-09-5P 220240-14-2P IT 220240-16-4P 220240-17-5P 220240-18-6P

RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(phosphonic acid agents and their antiangiogenic and

antitumorigenic use)

220239-81-6 220239-82-7 220239-83-8 TΤ 220239-84-9 220239-85-0 220239-86-1 220239-87-2 220239-88-3 220239-89-4 220239-90-7 220239-91-8 220239-92-9 220239-95-2 220239-96-3 220239-97-4

> 220239-98-5 220240-02-8 220240-03-9 RL: BAC (Biological activity or effector, except adverse); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (phosphonic acid agents and their antiangiogenic and

antitumorigenic use)

ΙT 220240-08-4P

> RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (phosphonic acid agents and their antiangiogenic and

antitumorigenic use)

220240-08-4 HCAPLUS RN

Phosphonic acid, [carbonylbis(imino-3,1-phenylene)]bis- (9CI) (CA INDEX CN

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 3 ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 6 OF 19 HCAPLUS COPYRIGHT 2002 ACS L67

1999:34888 HCAPLUS AN

DN 130:66491

Preparation of urea derivatives as inhibitors of p38 TΙ

Salituro, Francesco Gerald; Bemis, Guy W.; Green, Jeremy; Kofron, James L. IN

Vertex Pharmaceuticals Incorporated, USA PΑ

SO PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|    |     | _      |     |     |     |     |      |           |     |     |      |       |       |     |      |      |     |     |
|----|-----|--------|-----|-----|-----|-----|------|-----------|-----|-----|------|-------|-------|-----|------|------|-----|-----|
|    | PAT | CENT 1 | NO. |     | KII | ND  | DATE |           |     | A.  | PPLI | CATI  | ОИ ИС | ο.  | DATE |      |     |     |
|    |     |        |     |     |     |     |      | - <i></i> |     | _   |      |       |       |     |      |      |     |     |
| ΡI | WO  | 9900   | 357 |     | A.  | 1   | 1999 | 0107      |     | M   | 0 19 | 98-U: | S134  | 96  | 1998 | 0629 | <   |     |
|    |     | W:     | AL, | AM, | AT, | ΑU, | ΑZ,  | BA,       | BB, | BG, | BR,  | BY,   | CA,   | CH, | CN,  | CU,  | CZ, | DE, |
|    |     |        | DK, | EE, | ES, | FI, | GB,  | GE,       | GH, | GM, | GW,  | ΗU,   | ID,   | IL, | IS,  | JP,  | KΕ, | KG, |
|    |     |        |     |     |     |     |      |           |     |     |      |       |       |     | MK,  |      |     |     |
|    |     |        | NO, | ΝZ, | PL, | PT, | RO,  | RU,       | SD, | SE, | SG,  | SI,   | SK,   | SL, | ТJ,  | TM,  | TR, | TT, |
|    |     |        | UA, | UG, | UZ, | VN, | YU,  | ZW,       | AM, | ΑZ, | BY,  | KG,   | ΚZ,   | MD, | RU,  | ТJ,  | TM  |     |
|    |     | RW:    | GH, | GM, | ΚĒ, | LS, | MW,  | SD,       | SZ, | UG, | ZW,  | AT,   | ΒE,   | CH, | CY,  | DE,  | DK, | ES, |
|    |     |        |     |     |     |     |      |           |     |     |      |       |       |     |      |      |     |     |

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FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
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    US 6093742
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                            19990119
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                                           EP 1998-934195
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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PRAI US 1997-884160
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                       W
                            19980629
    MARPAT 130:66491
os
    The title compds. WX1C(:Y)X2Z [W = (un)substituted satd., partially satd.
AΒ
    or arom. monocyclic or bicyclic ring system optionally comprising up to 4
    heteroatoms; Y = O, etc.; X1, X2 = O, S, etc.; Z = cycloalkyl, etc.] are
    prepd. Compds. of this invention are inhibitors of p38, a mammalian
    protein kinase involved in cell proliferation, cell
    death and response to extracellular stimuli. In in vitro assays for
    inhibition of phosphorylation of EGF receptor peptide, compds. of this
    invention showed IC50 values of 0.14 .mu.M to 19 .mu.M.
    101-20-2P 369-81-3P 1566-96-7P
    2008-73-3P 4300-43-0P 13114-79-9P
    13141-95-2P 13142-35-3P 13142-47-7P
    13142-48-8P 13142-50-2P 13143-23-2P
    13208-22-5P 13256-73-0P 16655-20-2P
    85260-98-6P 107917-67-9P 117745-34-3P
    196617-12-6P 196617-13-7P 196700-19-3P
    196700-39-7P 196700-55-7P 196700-64-8P
    197800-69-4P 199741-56-5P 202598-90-1P
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study, unclassified); SPN (Synthetic preparation); THU (Therapeutic

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use); BIOL (Biological study); PREP (Preparation); USES (Uses)
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IT
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        (prepn. of urea derivs. as inhibitors of p38)
     101-20-2 HCAPLUS
RN
     Urea, N-(4-chlorophenyl)-N'-(3,4-dichlorophenyl)- (9CI) (CA INDEX NAME)
CN
Cl
                               Cl
               THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
               ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2002 ACS
     1998:776671 HCAPLUS
AN
     130:38286
DN
ΤI
     Inhibition of p38 kinase activity by aryl ureas
     Ranges, Gerald; Scott, William; Bombara, Michael; Rauner, Deborah; Redman,
ΙN
     Aniko; Smith, Roger; Paulsen, Holger; Chen, Jinshan; Gunn, David; Renick,
     Joel
     Bayer Corp., USA; et al.
PΑ
SO
     PCT Int. Appl., 84 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                              APPLICATION NO.
                                                                DATE
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PΤ
     WO 9852558
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         NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
              FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
              CM, GA, GN, ML, MR, NE, SN, TD, TG
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                                                                19980521 <--
     EP 1019040
                        A1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, FI
     JP 2001526687
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                              20011218
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                                              US 1998-83396
                                                                19980522 <--
     US 6344476
                        B1
                              20020205
PRAI US 1997-863022
                        A2
                              19970523
                                        <--
     US 1997-98557P
                              19970523
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                        W
OS
     MARPAT 130:38286
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GI

$$R^5$$
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 $R^5$ 
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 $R^2$ 
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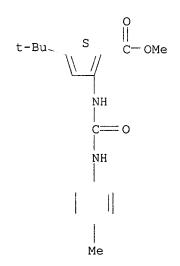
The title ureas ANHC(0)NHB [I; A = (un)substituted C6-12 aryl, C5-12 heteroaryl; B = II-V; R1 = H, C1-4 alkyl; R2, R3 = halo, COOR1, CN, etc.; R5 = C3-5 alkyl], useful in treating cytokine mediated diseases other than cancer and proteolytic enzyme mediated diseases other than cancer, were prepd. Thus, reaction of N-methyl-3-amino-5-tert-butylthiophene-2-carboxamide (prepn. given) with 4-methylphenyl isocyanate in PhMe afforded 44% the title compd. VI. Compds. I are useful in treating diseases mediated by TNF.alpha., MMP-1, MMP-3, IL-1, IL-6, or IL-8 such as rheumatoid arthritis, osteoporosis, asthma, septic shock, inflammatory bowel disease, or the result of host-vs.-graft reactions. All exemplified compds. I showed p38 IC50s of 1 nM - 10 .mu.M.

216573-01-2P 216574-43-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation);
THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)
 (inhibition of p38 kinase activity by aryl ureas)

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IT
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        (inhibition of p38 kinase activity by aryl ureas)
RN
    216573-01-2 HCAPLUS
    2-Thiophenecarboxylic acid, 5-(1,1-dimethylethyl)-3-[[[(4-
CN
    methylphenyl)amino]carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)
```



PATENT NO.

## RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L67 ANSWER 8 OF 19 HCAPLUS COPYRIGHT 2002 ACS 1998:352627 HCAPLUS AN DN 129:54476 ΤI Protein kinase inhibitors for treatment of neurological Lewis, Michael E.; Kauer, James C.; Neff, Nicola; Roberts-Lewis, Jill; ΙN Murakata, Chikara; Saito, Hiromitsu; Matsuda, Yuzuru; Glicksman, Marcie A.; Kanai, Fumihiko; Kaneko, Masami Cephalon, Inc., USA; Kyowa Hakko Kogyo Co., Ltd. PΑ U.S., 61 pp. Cont.-in-part of U.S. Ser. No. 329,540. SO CODEN: USXXAM DT Patent LA English FAN.CNT 6 KIND DATE APPLICATION NO.

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GΙ
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Derivs. of K-252a I (R = HO, MeO; R1 = H, Br, NHCONHPh, CH2SPh, 2-pyrimidinylthiomethyl, 2-furylmethylthiomethyl, etc.; R2 = H, Br, Cl, CH2OH, etc.; R 3 = CH2OH, CO2Me, CH2NHCO2Ph, CONHPh, CH2NHCO2Me, etc.; Z = O, H2), as well as novel bis-N-substituted derivs. of staurosporine XNMeWNMeX (W = C(:Y)NH, W1NHC(:Y); W1 = hydrocarbylene radical of 2-20 carbon atoms; Y = O, S) were prepd. The invention also features a method for treating diseased neuronal cells involving the administration of either the novel staurosporine derivs. or specified functional derivs. of K-252a. Thus, staurosporine was treated with hexamethyl-bis-isocyanate to give 1,6-hexamethylene-bis-(carbamylstaurosporine). The spinal cord choline acetyltransferase (CHAT) activity of I (R = OH, R1 = R2 = Br; R3 = CH2OH, Z = H2) at 300 nM was 146 compared with K-252a of 100.

IT 121664-76-4P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of staurosporine and K-252a derivs. as protein kinase inhibitors for treatment of neurol. disorders)

IT 121664-76-4P

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

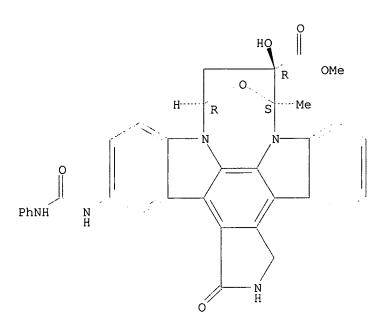
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RN 121664-76-4 HCAPLUS

CN

9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[[(phenylamino)carbonyl]amino]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L67 ANSWER 9 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 1998:202672 HCAPLUS

DN 128:257439

TI Preparation of 6-arylpyrido[2,3-d]pyrimidines and naphthyridines for inhibiting protein tyrosine kinase mediated cellular proliferation

IN Blankley, Clifton John; Doherty, Annette Marian; Hamby, James Marino; Panek, Robert Lee; Schroeder, Mel Conrad; Showalter, Howard Daniel Hollis; Connolly, Cleo

PA USA

SO U.S., 36 pp. Cont.-in-part of U.S. Ser. No. 339,051, abandoned. CODEN: USXXAM

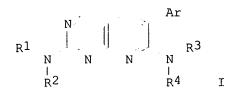
DT Patent

LA English

FAN.CNT 2

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The title compds. [I; R1, R2, R4 = H, C1-8 alkyl, C2-8 alkenyl, etc.; R3 = C(0)R8, C02R8, C(S)R8, etc.; R8 = H, C1-8 alkyl, C2-8 alkenyl, etc.; Ar = (un)substituted arom. ot heteroarom. selected from Ph, imidazolyl, pyrrolyl, etc.], inhibitors of protein tyrosine kinase which are esp. useful in treating atherosclerosis, restenosis, psoriasis, as well as bacterial infections, were prepd. and formulated. Thus, reaction of 2,7-diamino-6-(2,6-dichlorophenyl)pyrido[2,3-d]pyrimidine (prepn. described) with tert-Bu isocyanate in the presence of NaH in DMF afforded the urea I [R1 = R4 = H; R2 = R3 = C(0)NHtBu; Ar = 2,6-C12C6H3] which showed IC50 of 10.2 .mu.M against PDGF receptor tyrosine kinase.

IT 179342-64-4P 179342-65-5P 179342-66-6P 179342-67-7P 179342-68-8P 179342-69-9P 179342-71-3P 179342-73-5P 179342-74-6P 179342-76-8P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 6-arylpyrido[2,3-d]pyrimidines and naphthyridines for inhibiting protein tyrosine kinase mediated cellular proliferation)

IT 179342-64-4P

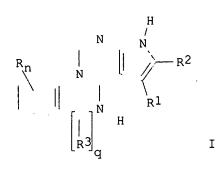
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(prepn. of 6-arylpyrido[2,3-d]pyrimidines and naphthyridines for inhibiting protein tyrosine kinase mediated cellular proliferation)

RN 179342-64-4 HCAPLUS

CN Urea, N-[6-(2,6-dichlorophenyl)-2-[[3-(4-methyl-1piperazinyl)propyl]amino]pyrido[2,3-d]pyrimidin-7-yl]-N'-(4-methoxyphenyl)(9CI) (CA INDEX NAME)

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ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2002 ACS
L67
     1998:147332 HCAPLUS
ΑN
DN
     128:192664
     Preparation of substituted pyrrolopyrimidines as antitumor
ΤI
     Traxler, Peter; Bold, Guido; Lang, Marc; Frei, Jorg
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     Novartis A.-G., Switz.; Traxler, Peter; Bold, Guido; Lang, Marc; Frei,
PA
     Jorg
     PCT Int. Appl., 86 pp.
SO
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The title compds. [I; n = 0-3; q = 0-1; R = halo, lower alkyl, HOCH2, etc.; one of the radicals R1 and R2 = H, lower alkyl, and the other of the radicals R1 and R2 = (un)substituted Ph, amino-lower alkyl, piperidine-1-carbonyl, etc.], inhibitors of the tyrosine kinase activity of the receptor for the epidermal growth factor (EGF) and c-erbB2kinase and therefore useful as antitumor agents, were prepd. and formulated. Thus, hydrogenation of 4-(3-chloroanilino)-6-formyl-7H-pyrrolo[2,3-d]pyrimidine (prepn. described) with N-methylpiperazine in the presence of Raney Ni in DMPU, AcOH and MeOH afforded I [R = 3-Cl; R1 = H; R2 = 4-methylpiperazin-1-ylmethyl; q = 0]. Compds. I inhibit EGF-R-PTK activity by 50% (IC50), for example in a concn. of 0.0005-1 .mu.M, esp. from 0.001-1 .mu.M. Compds. I are effective at 0.5-2 g/day when administered to a patient of a body wt. of about 70 kg.

IT 203724-16-7P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of substituted pyrrolopyrimidines as antitumor agents)

IT 203724-16-7P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of substituted pyrrolopyrimidines as antitumor agents)

RN 203724-16-7 HCAPLUS

CN Urea, N-[3-[4-[(3-chlorophenyl)amino]-1H-pyrrolo[2,3-d]pyrimidin-6-yl]phenyl]-N'-phenyl- (9CI) (CA INDEX NAME)

NH O NH NH-C-NHPh

L67 ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:803799 HCAPLUS

DN 128:66489

TI Compositions and methods for treating or preventing diseases of body

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passageways
IN
     Hunter, William L.; Machan, Lindsay S.
    Angiotech Pharmaceuticals, Inc., Can.; University of British Columbia;
PA
     Hunter, William L.; Machan, Lindsay S.
SO
     PCT Int. Appl., 207 pp.
     CODEN: PIXXD2
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LA
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FAN.CNT 1
                      KIND DATE
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    The present invention provides methods for treating or preventing diseases
AΒ
    assocd. with body passageways, comprising the step of delivering to an
    external portion of the body passageway a therapeutic agent.
    Representative examples of therapeutic agents include anti-angiogenic
     factors, anti-proliferative agents, anti-inflammatory agents,
     and antibiotics. Pastes and nanosprays contg. polycaprolactone were
    prepd.
ΙT
    145-63-1, Suramin
     RL: PEP (Physical, engineering or chemical process); THU (Therapeutic
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    145-63-1 HCAPLUS
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CN
    phenylenecarbonylimino(4-methyl-3,1-phenylene)carbonylimino]]bis- (9CI)
     (CA INDEX NAME)
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PAGE 1-A

PAGE 1-B

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L67 ANSWER 12 OF 19 HCAPLUS COPYRIGHT 2002 ACS
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DN
     128:39550
ΤI
     Combinations of angiostatic compounds
IN
     Doshi, Rupa; Clark, Abbot F.
     Clark, Abbot F., USA; Doshi, Rupa; Alcon Laboratories, Inc. PCT Int. Appl., 52 pp.
PA
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                       KIND
                                             APPLICATION NO.
                                                               DATE
     PATENT NO.
                             DATE
                             19971113
                                             WO 1997-US5574
                                                               19970403 <---
PΙ
     WO 9741844
                       Α1
         W: AU, CA, JP, US
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                             AU 1997-24382
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                       A1
PRAI US 1996-17096P
                        Ρ
                             19960509
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     WO 1997-US5574
                             19970403 <---
                        W
     MARPAT 128:39550
OS
     The present invention is directed to compns. contg. combinations of
AΒ
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angiostatic compds. (chromans or benzofurans and e.g., steroids ) and methods for their use in preventing pathol. neovascularization. Thus, 2-(5-hydroxy-2,4,6,7-tetramethyl-3,4-dihydrobenzo[1,2-b]furan-2-yl)ethyl 2-(6-methoxy-2-naphthyl)propionate (I) was prepd. by the reaction of 2-(5-hydroxy-2,4,6,7-tetramethyl-3,4-dihydrobenzo[1,2-b]furan-2-yl)ethanol with 6-methoxy-.alpha.-methylnaphthaleneacetic acid in the presence of dimethylaminopyridine and 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide-HCl in THF. Thus, a topical ocular soln. contained I 1.0, another angiostatic compd.0.005-5.0%, benzalkonium chloride 0.01, HPMC 0.5, NaCl 0.8, Na phosphate 0.28, and disodium edetate 0.01%, NaOH/HCl qs pH 7.2, and water qs to 100 mL.

IT 145-63-1D, Suramin, analogs
RL: BAC (Biological activity or effector, except adverse); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceuticals contg. combinations of angiostatic compds.)

RN 145-63-1 HCAPLUS

CN 1,3,5-Naphthalenetrisulfonic acid, 8,8'-[carbonylbis[imino-3,1-phenylenecarbonylimino(4-methyl-3,1-phenylene)carbonylimino]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

the second

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L67 ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2002 ACS
    1997:140236 HCAPLUS
AN
    126:139899
DN
    Urea- and thiourea-type compounds capable of modulating tyrosine signal
TΙ
    transduction
    Tang, Peng Cho; McMahon, Gerald
IN
PA
    Sugen, Inc., USA
    PCT Int. Appl., 94 pp.
SO
    CODEN: PIXXD2
DT
    Patent
    English
LA
FAN.CNT 1
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            LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
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PRAI US 1995-486816
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    WO 1996-US9077
                            19960604 <--
    MARPAT 126:139899
OS
    The present invention relates to mols. capable of modulating tyrosine
AΒ
    signal transduction to prevent and treat cell proliferative
    disorders or cell differentiation disorders assocd. with particular
    tyrosine kinases by inhibiting one or more abnormal tyrosine
    kinase activities. Four such compds. are N-[chloro-4-
     (isopropylsulfonyl)thien-2-yl]-N'-(4-t-butylphenyl)urea,
    N-[3-chloro-4-(isopropylsulfonyl)thien-2-yl]-N'-(3,5-
    ditrifluoromethylphenyl)urea, N-[2-(2,4-dichlorophenoxy)pyrid-5-yl]-N'-[4-
    trifluoromethyl(mercapto)phenyl]urea, and N-(4-cyanophenyl)-N'-[4-
     [(piperid-1-yl)sulfonyl]phenyl]thiourea. Disorders of Her2, EGFR, IGFR,
    PDGFR, met, Src and KDR/Flk-1 can be treated.
    186645-70-5P 186645-71-6P 186645-72-7P
IT
    RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or
    effector, except adverse); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (prepn. of urea- and thiourea-type compds. capable of modulating
        tyrosine signal transduction)
    186645-70-5P
TΤ
    RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or
    effector, except adverse); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (prepn. of urea- and thiourea-type compds. capable of modulating
        tyrosine signal transduction)
     186645-70-5 HCAPLUS
RN
    Urea, N-[3-chloro-4-[(1-methylethyl)sulfonyl]-2-thienyl]-N'-[4-(1,1-methylethyl)sulfonyl]
CN
     dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)
```

L67 ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2002 ACS

1996:467130 HCAPLUS ΑN

DN 125:114688

Preparation of 6-aryl pyrido[2,3-d]pyrimidines and naphthyridines for ΤI inhibiting protein tyrosine kinase-mediated cellular

Blankley, Clifton John; Doherty, Annette Marian; Hamby, James Marino; ΙN Panek, Robert Lee; Schroeder, Mel Conrad; Showalter, Howard Daniel Hollis; Connolly, Cleo

PAWarner-Lambert Company, USA

PCT Int. Appl., 134 pp. SO CODEN: PIXXD2

DT Patent

LA English FAN.CNT 2

| FAN. | PATENT NO.   | KIND DA          | ГЕ<br>           | APPLICATION NO.   | DATE                               |
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| PI   | W: AM, AU,   | BG, BY, C        | A, CN, CZ,       | WO 1995-US14700<br>EE, FI, GE, HU, JP                                       | , KG, KR, KZ, LT,                  |
|      | RW: AT, BE,  | CH, DE, DI       | K, ES, FR,       | RU, SG, SI, SK, TJ<br>GB, GR, IE, IT, LU<br>US 1995-539410<br>AU 1996-41078 | , MC, NL, PT, SE                   |
|      | AU 711426  | B2 199           | 991014           |   |                                    |
|      | EP 790997<br>EP 790997                               | A2 199<br>B1 200 | 970827<br>000322 | EP 1995-939129  |                                    |
|      | JP 10509452  | T2 199           | 980914           | JP 1995-516240  | , LU, MC, NL, PT, SE<br>19951113 < |
|      | SK 281724  | B6 200           | 010710           | AT 1995-939129<br>SK 1997-609   | 19951113 <                         |
|      | FI 9701953   | A 199            | 970512           | PL 1995-320169<br>FI 1997-1953  | 19970507 <                         |
| PRAI | US 1994-339051                                       | A 199            | 941114 <-        |   | 19970513 <                         |
| os   | US 1995-539410<br>WO 1995-US14700<br>MARPAT 125:1146 | W 19             |                  |   |                                    |
| GI   | MARFAI 125:1140                                      | 00               |                  |   |                                    |

6-Arylpyrido[2,3-d]pyrimidines and naphthyridines I [X = CH, N; B = halo, OH, NR3R4; R1, R2, R3, R4 = H, C1-8 alkyl, C2-8 alkenyl, C2-8 alkynyl, AB Ar', amino, C1-8 alkylamino, di-C1-8 alkylamino, wherein the alkyl,

alkenyl, and alkynyl groups may be substituted by amino, OH, or 5- or 6-membered carbocyclic or heterocyclic ring; Ar, Ar' = (un)substituted arom. or heteroarom. groups; R1R2N or R3R4N can complete a ring having 3-6 C atoms and optionally contg. 1 or 2 heteroatoms; when X = N and B = NR3R4, one of R3 and R4 .noteq. H] or their pharmaceutically acceptable acid and base addn. salts, useful as inhibitors of protein tyrosine kinase and thus useful in treating cellular proliferation mediated thereby, are claimed. The compds. are esp. useful in treating atherosclerosis, restenosis, psoriasis, as well as bacterial infections. In an example, the IC50 of I [X = N, B = NHCONH2, R1 = H, R2 = Et2N(CH2) 4 Ar = 2,6-Cl2C6H3; prepn. given] for inhibition of protein tyrosine kinases was 0.231 .mu.M for PDGF and 0.0954 for FGF.

IT 179342-64-4P 179342-65-5P 179342-66-6P 179342-67-7P 179342-68-8P 179342-69-9P 179342-71-3P 179342-73-5P 179342-74-6P 179342-76-8P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of aryl pyridopyrimidines and naphthyridines for inhibiting protein tyrosine kinase-mediated cellular proliferation)

IT 179342-64-4P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of aryl pyridopyrimidines and naphthyridines for inhibiting protein tyrosine **kinase**-mediated cellular

proliferation)

RN 179342-64-4 HCAPLUS

CN Urea, N-[6-(2,6-dichlorophenyl)-2-[[3-(4-methyl-1-piperazinyl)propyl]amino]pyrido[2,3-d]pyrimidin-7-yl]-N'-(4-methoxyphenyl)-(9CI) (CA INDEX NAME)

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L67 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2002 ACS
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AN 1995:777654 HCAPLUS

DN 123:198839

TI Preparation of indolocarbazole derivatives to treat prostatic cancer and hypertrophy

IN Dionne, Craig A.; Contreras, Patricia C.; Murakata, Chikara

PA Cephalon, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.

SO PCT Int. Appl., 95 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

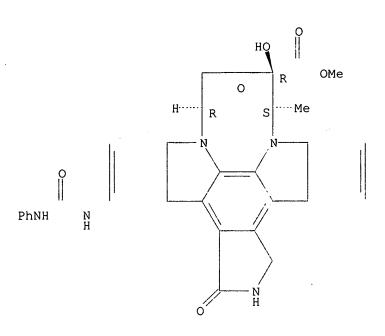
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| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE       |
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| WO 9427982 | A1   | 19941208 | WO 1994-US6082  | 19940527 < |

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     MARPAT 123:198839
os
GI
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- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- The title compds. [I; R = OH, alkoxy, acyloxy; R1, R2, R5, R6 = H, C1, F, Br, I, NO2, CN, substituted ureido, etc.; X = H, CONHPh, etc.; Z1, Z2 = H, O (when combined)] [II; R1, R2, R5, R6 = H, halogen, NO2, CN, OH, substituted ureido; R3, R4 = H. alkyl, hydroxyalkyl, alkenyl; Z1, Z2 = H, O (when combined)], useful as inhibitors of tyrosine kinase activity assocd. with neurotropin receptors for treating benign prostatic hypertrophy or prostate cancer, are prepd. Thus, oxadiazepine I (R = OH, R1 = R2 = R5 = R6 = Z1 = Z2 = H, X = CONHCH2CH2OH) was prepd. and demonstrated a IC50 of 0.038 .mu.M against the Tsu-Prl human prostate cancer cell line.
- IT 121664-76-4
  - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (claimed compd.; prepn. of indolocarbazole derivs. to treat prostatic cancer and benign prostatic hypertrophy)
- IT 121664-76-4
  - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (claimed compd.; prepn. of indolocarbazole derivs. to treat prostatic cancer and benign prostatic hypertrophy)
- RN 121664-76-4 HCAPLUS
- CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[[(phenylamino)carbonyl]amino]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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L67
     ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2002 ACS
     1994:400902 HCAPLUS
ΑN
     121:902
DN
     Therapeutic-binding protein conjugate for inhibitor of vascular smooth
ΤI
     muscle cells
IN
     Kunz, Lawrence Leroy
     Neorx Corp., USA
PΑ
SO
     PCT Int. Appl., 104 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 12
                                             APPLICATION NO.
                                                               DATE
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                        Α1
     US 1999-470662
                        Α1
                             19991222
     Methods are provided for inhibiting stenosis following vascular trauma or
AB
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disease in a mammalian host, comprising administering to the host a therapeutically effective dosage of a therapeutic conjugate contg. a vascular smooth muscle binding protein that assocs. in a specific manner with a cell surface of the vascular smooth muscle cell, coupled to a therapeutic agent that inhibits a cellular activity of the muscle cell. Prepn. and testing of Roridin A-monoclonal antibody conjugates is described.

IT 145-63-1D, Suramin, conjugates with vascular smooth muscle
 cell-specific binding proteins

RL: BIOL (Biological study)

(for noncytocidal vascular smooth muscle cell inhibition)

IT 145-63-1D, Suramin, conjugates with vascular smooth muscle cell-specific binding proteins

RL: BIOL (Biological study)

(for noncytocidal vascular smooth muscle cell inhibition)

RN 145-63-1 HCAPLUS

CN 1,3,5-Naphthalenetrisulfonic acid, 8,8'-[carbonylbis[imino-3,1-phenylenecarbonylimino(4-methyl-3,1-phenylene)carbonylimino]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

L67 ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2002 ACS AN 1994:217715 HCAPLUS

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DN
     120:217715
ΤI
     Quinazoline tyrosine kinase-inhibiting anticancer
ΙN
     Barker, Andrew J.
     Zeneca Ltd., UK
PA
SO
     Can. Pat. Appl., 99 pp.
     CODEN: CPXXEB
DT
     Patent
LA
     English
FAN.CNT 1
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OS
    MARPAT 120:217715
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GI

The title compds. I [R1 = HO, (un)substituted amino, carboxy, carbamoyl, ureido, etc.; R2 = H, HO, halogen, CF3, NH2, NO2, CN, (un)substituted C1-4 alkyl, etc.; m = 1-3; n = 1, 2], useful as tyrosine kinase -inhibiting anticancer agents (no data), are prepd. and I-contg. formulations presented. Thus, 4-chloro-6,7-dimethoxyquinazoline was condensed with 3-MeC6H4NH2, producing 6,7-dimethoxy-4-(3'-methylanilino)quinazoline hydrochloride, m.p. 248-249.degree..

IT 153437-28-6P

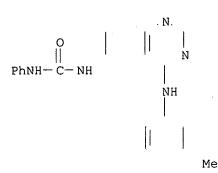
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as tyrosine kinase-inhibiting anticancer agent)
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IT 153437-28-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as tyrosine kinase-inhibiting anticancer
 agent)

RN 153437-28-6 HCAPLUS

CN Urea, N-[4-[(3-methylphenyl)amino]-6-quinazolinyl]-N'-phenyl- (9CI) (CA INDEX NAME)



```
AN 1993:167454 HCAPLUS
DN 118:167454
TI Antibodies against the urokinase plasminogen activator receptor (u-PAR) and their use
```

IN Danoe, Keld; Roenne, Ebbe; Behrendt, Niels; Ellis, Vincent; Hoeyer-Hansen, Gunilla; Pyke, Charles; Bruenner, Nils

PA Cancerforskningsfondet af 1989, Den.

L67 ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2002 ACS

SO PCT Int. Appl., 215 pp. CODEN: PIXXD2

DT Patent

LA English

| LA<br>FAN. | •  | glish<br>4   |                 |   |
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| I AIV.     |    |              | KIND DATE       | APPLICATION NO. DATE                    |
| PI         | WO |              |                 | WO 1991-DK319 19911018 <                |
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|            | US | 6113897      | A 20000905      | US 1995-580166 19951228 <               |
| PRAI       | WO | 1990-DK270 . | A 19901018      | <                                       |
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|            |    |              | A2 19890407     | · <                                     |
|            |    | 1989-374854  |                 |   |
|            | WO | 1990-DK90    | A1 19900409     | ) <                                     |

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WO 1991-DK319 A 19911018 <--
US 1991-824189 B2 19911206 <--
WO 1992-DK306 A 19921019 <--
US 1993-85122 A3 19930617 <--
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AB Monoclonal and polyclonal antibodies are provided which are directed against u-PAR or a subsequence, analog, or glycosylation variant thereof. Antibodies are disclosed which react with free u-PAR or with complexes between u-PA and u-PAR which can (1) catch u-PAR in an ELISA; (2) detect u-PAR, e.g. in blotting; (3) in radioimmunopptn. assay ppt. purified u-PAR in intact or fragment form; (4) detect u-PAR immunohistochem., e.g. in immunostaining of cancer cells, such as in tissue sections or at the invasive front; and (5) inhibit the binding of pro-u-PA and active u-PA and thereby inhibit cell-surface plasminogen activation. Methods are disclosed (1) for detecting or quantifying u-PAR; (2) for targeting a diagnostic to a cell contg. a u-PAR on the surface; and (3) for preventing or counteracting proteolytic activity in a mammal. Methods for selecting a substance suitable for inhibiting the u-PA/u-PAR interaction, for preventing or counteracting localized proteolytic activity in a mammal, or for inhibiting invasion and/or metastasis comprise the use of the antibodies and of nude mice inoculated with human cancer cells which are known to invade and/or metastasize in mice and having a distinct color (produced by an enzyme and chromogenic substrate) which is different from that of the cells of the mouse. Prepn. of the antibodies is described, as are isolation and characterization of u-PAR from U937 cells and immunochem. procedures using the antibodies. Monoclonal antibodies against u-PA inhibited the invasive and metastatic process in mice.

IT **145-63-1**, Suramin

RL: PRP (Properties)

(urokinase-type plasminogen activator interaction with receptor in presence of, immunochem. screening assay for, antibodies for)

IT 145-63-1, Suramin

RL: PRP (Properties)

(urokinase-type plasminogen activator interaction with receptor in presence of, immunochem. screening assay for, antibodies for)

RN 145-63-1 HCAPLUS

CN 1,3,5-Naphthalenetrisulfonic acid, 8,8'-[carbonylbis[imino-3,1-phenylenecarbonylimino(4-methyl-3,1-phenylene)carbonylimino]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

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L67 ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2002 ACS
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AN 1989:477750 HCAPLUS

DN 111:77750

TI K-252 derivatives as protein kinase C inhibitors, their preparation, and formulations containing them

preparation, and formulations containing them
IN Hirata, Tadashi; Mochida, Kenichi; Muragata, Tsutomu; Takahashi, Mitsuru;
Kase, Hiroshi; Yamada, Koji; Iwahashi, Kazuyuki; Sato, Akira; Kasai,
Masaji; et al.

PA Kyowa Hakko Kogyo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 40 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

|   | PATENT NO.         | KIND | DATE     |   | APPLICATION NO. | DATE       |
|---|--------------------|------|----------|---|-----------------|------------|
|   |                    |      |          |   |                 |            |
| Ρ | I JP 63295588      | A2   | 19881201 |   | JP 1987-327858  | 19871224 < |
|   | JP 08026036        | B4   | 19960313 |   |                 |            |
| P | RAI JP 1987-12719  |      | 19870122 | < |                 |            |
| 0 | S MARPAT 111:77750 |      |          |   |                 |            |
| _ | _                  |      |          |   |                 |            |

GΙ

The title compds. I [R1,R2 = H, Me, hydroxymethyl, lower alkoxymethyl, alkylthiomethyl, etc.; R3 = H, Cl, lower alkanoyl, carbamoyl, etc.; X = hydroxymethyl, CO2H, lower alkoxycarbonyl, etc.; Y = OH, lower alkanoyloxy, etc., or YX = OCMe2OCH2, OCSNHCH2, etc.; provisos are given (for example, when X = hydroxymethyl, CO2H, lower alkoxycarbonyl, at least one of R1-R3 must be other than H)], useful as protein kinase C inhibitors, were prepd. Treatment of I (R1 = NH2, R2 = H, R3 = Ac, X = CO2Me, Y = OAc) (prepn. given) with MeONa, followed by workup and acidification, gave I.HCl (R1 = NH2, R2 = R3 = H, X = CO2Me, Y = OH) (II). II in vitro exhibited an IC50 of 0.175 .mu.g/mL against protein kinase C. A tablet formulation contg. I (R1 = R2 = R3 = H, X = CH:NOH, Y = OH) 100, starch 18, lactose 40, Ca CM-cellulose 10 g, hydroxypropylcellulose, and Mg stearate (amt. unspecified) is given.

IT 121665-13-2P

Ι

IT 121664-76-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as protein kinase C inhibitor)

IT 121665-13-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and reaction of, in prepn. of protein kinase C inhibitor)

RN 121665-13-2 HCAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[[(phenylamino)carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

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ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2002 ACS
L74
ΑN
       2002:241346 HCAPLUS
DN
       136:279203
ΤI
       Substituted phenyl derivatives, their preparation and use
       Dahl, Bjarne H.; Christophersen, Palle
ΙN
PΑ
SO
       U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 837,166.
       CODEN: USXXCO
DT
       Patent
LA
       English
FAN.CNT 4
       PATENT NO.
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IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,

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             AZ, BY, KG, KZ, MD, RU, TJ, TM
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             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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    US 1999-402165
                       Α2
                            19990930
    WO 1999-DK575
                       Α1
                            19991019
    US 2001-837166
                       Α2
                            20010419
GI
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\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

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AB Title compds. [I; 1 of R1-R3 = acidic functional group having pKa < 8 or a group convertible in vivo to such a group; R4, R5 and the others of R1-R3 = independently H, alkyl, alkoxy, OH, halo, CF3, cyano, NO2, amino, etc.; Y = C(X)NRO, NROC(X)NROO, etc.; R0, R00 = independently H, alkyl; X = O, S; R11-R15 = independently H, alkyl, alkoxy, OH, halo, CF3, cyano (substituted) aryl, heteroaryl, phenylamino, etc.] were prepd. Thus, 3-Trifluoromethylphenyl isocyanate and 2-aminobenzoic acid were stirred in PhMe to give N-3-trifluoromethylphenyl, N'-2-carboxyphenyl urea (II). The compds. are useful as chloride channel blockers. N-3-trifluoromethylphenyl-N'-[4'-(dimethylsulfamoyl)-2-(1H-tetrazol-5-yl)-4-biphenyl]urea (III) blocked erythrocyte chloride channels with KD = 0.3 .mu.M.
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IT 265646-59-1P 405520-02-7P

ΙT

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (prepn. of diarylureas and related compds. as chloride channel blockers)

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1566-81-0P 2164-95-6P 200193-42-6P
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265646-54-6P 265646-55-7P 265646-57-9P
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405520-69-6P 405520-74-3P
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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(prepn. of diarylureas and related compds. as chloride channel blockers)

405520-70-9 IT

RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of diarylureas and related compds. as chloride channel

265646-59-1P ΙT

RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (prepn. of diarylureas and related compds. as chloride channel blockers)

265646-59-1 HCAPLUS RN

CN Urea, N-[4-amino-2-(1H-tetrazol-5-yl)phenyl]-N'-[3-(trifluoromethyl)phenyl] - (9CI) (CA INDEX NAME)

L74 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2002 ACS

2001:521916 HCAPLUS ΑN

135:107152 DN

Preparation of N, N'-diphenyl ureas as IL-8 receptor antagonists TΤ

ΙN Widdowson, Katherine Louisa; Veber, Daniel Frank; Jurewicz, Anthony Joseph; Hertzberg, Robert Philip; Rutledge, Melvin Clarence, Jr.

Smithkline Beecham Corp., USA PΑ

U.S., 51 pp., Cont.-in-part of U.S. 58,86,044. SO CODEN: USXXAM

DT Patent

LAEnglish

| FAN. | CNT 4                                 |           |           |         |                |            |         |       |  |
|------|---------------------------------------|-----------|-----------|---------|----------------|------------|---------|-------|--|
|      | PATENT NO.                            | KIND      | DATE      | A       | PPLICATION NO. | DATE       |         |       |  |
|      |                                       |           |           |         |                |            |         |       |  |
| PΙ   | US 6262113                            | B1        | 20010717  | US      | S 1998-125279  | 19980814   | <       |       |  |
|      | US 5886044                            | Α         | 19990323  | US      | S 1996-641990  | 19960320   | <       |       |  |
|      | WO 9729743                            | A1        | 19970821  | WC      | 0 1996-US13632 | 19960821   | <       |       |  |
|      | W: AI. A                              | M. AU. BB | . BG. BR. | CA, CN. | CZ, EE, GE, HU | J. IL. IS. | JP, KG, |       |  |
|      | •                                     |           |           |         | MK, MN, MX, NO |            |         |       |  |
|      | •                                     |           |           |         | AM, AZ, BY, KG | •          |         | гм    |  |
|      | •                                     |           |           |         |                |            |         | r r-1 |  |
|      | · · · · · · · · · · · · · · · · · · · |           |           |         | CH, DE, DK, ES |            | •       |       |  |
|      | IE, I                                 | T, LU, MC | , NL, PT, | SE, BF, | BJ, CF, CG, CI | C, CM, GA, | GN, ML, |       |  |
|      | MR, N                                 | E, SN, TD | , TG      |         |                |            |         |       |  |
| PRAI | US 1996-64199                         | 0 A2      | 19960320  | <       |                |            |         |       |  |
|      | WO 1996-US136                         | 32 W      | 19960821  | <       |                |            |         |       |  |
|      | US 1995-39026                         | 0 B2      | 19950217  | <       |                |            |         |       |  |
|      | WO 1996-US226                         |           | 19960216  | <       |                |            |         |       |  |
| os   | MARPAT 135:10                         | -         | 13330210  | -       |                |            |         |       |  |
| CT   | rimiteri 133.10                       | 1172      |           |         |                |            |         |       |  |

GI

The title compds. [I; X = O; X1 = O, S; R1 = H, halo, NO2, etc.; two R1 AΒ moieties together may form O(CH2)sO, 5-6 membered unsatd. ring; s = 1-3; Y = H, halo, NO2, etc.; two Y moieties together may form O(CH2)sO, 5-6 membered unsatd. ring; n, m = 1-3, useful for treating a chemokine mediated disease, wherein the chemokine is one which binds to an IL-8 .alpha. or .beta. receptor, were prepd. Thus, reacting Me 4-amino-3-hydroxybenzoate with Ph isocyanate afforded 90% I [X = O; R = OH; R1 = 4-CO2Me; m = 1; Y = H]. All of the exemplified compds. I showed an IC50 from about 45 to about < 1 .mu.g/mL against IL-8 receptor binding. All of these compds. were also found to be inhibitors of Gro-.alpha. binding at about the same level. TΤ 160383-79-9P 182497-99-0P 182498-47-1P 182498-79-9P 182498-99-3P 182499-02-1P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists) 85915-46-4P 88846-90-6P 92949-89-8P IΤ 117745-32-1P 160383-78-8P 160383-90-4P 182498-03-9P 182498-07-3P 182498-11-9P 182498-15-3P 182498-18-6P 182498-20-0P 182498-22-2P 182498-25-5P 182498-26-6P 182498-28-8P 182498-30-2P 182498-31-3P 182498-32-4P 182498-33-5P 182498-34-6P 182498-35-7P 182498-38-0P 182498-40-4P 182498-42-6P 182498-44-8P 182498-45-9P 182498-46-0P 182498-48-2P 182498-50-6P 182498-52-8P 182498-54-0P 182498-55-1P 182498-57-3P 182498-59-5P 182498-62-0P 182498-63-1P 182498-64-2P 182498-66-4P 182498-67-5P 182498-68-6P 182498-69-7P 182498-70-0P 182498-71-1P 182498-72-2P 182498-73-3P 182498-74-4P 182498-75-5P 182498-76-6P 182498-77-7P 182498-78-8P 182498-81-3P 182498-82-4P 182498-83-5P 182498-84-6P 182498-85-7P 182498-86-8P 182498-87-9P 182498-88-0P 182498-89-1P 182498-90-4P 182498-91-5P 182498-92-6P 182498-93-7P 182498-94-8P 182498-95-9P 182498-97-1P 182498-98-2P 182499-00-9P 182499-01-0P 182499-03-2P 182499-05-4P 182499-06-5P 182499-07-6P 182499-08-7P 182499-09-8P 182499-10-1P 182499-11-2P 182499-12-3P 182499-13-4P 182499-14-5P 182499-15-6P 182499-16-7P 182499-17-8P 182499-18-9P 182499-19-0P 182499-20-3P 182499-21-4P 182499-22-5P 182499-23-6P 182499-25-8P 182499-26-9P 182499-27-0P 182499-28-1P 182499-29-2P 182499-30-5P 182499-31-6P 182499-32-7P 182499-33-8P 182499-34-9P 182499-35-0P 182499-36-1P

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   (prepn. of N, N'-diphenyl ureas as IL-8 receptor antagonists)
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182500-24-9P 182500-25-0P
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(Reactant or reagent)
   (prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)
160383-79-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); RCT (Reactant); THU (Therapeutic use);
THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)
   (prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)
160383-79-9 HCAPLUS
Urea, N-(2-hydroxy-4-nitrophenyl)-N'-[3-(trifluoromethyl)phenyl]- (9CI)
(CA INDEX NAME)
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TΤ

ΙT

RN

CN

## RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2002 ACS
L74
      2000:290984 HCAPLUS
AN
DN
      132:308142
ΤI
      Preparation of diarylureas and related compounds as chloride channel
      blockers.
IN
      Dahl, Bjarne H.; Christophersen, Palle
PA
      Neurosearch A/s, Den.
SO
      PCT Int. Appl., 45 pp.
      CODEN: PIXXD2
DT
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LA
      English
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                                  DATE
                                                     APPLICATION NO.
                                                                          DATE
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                                  20000504
                                                    WO 1999-DK575
PI
      WO 2000024707
                           A1
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                AZ, BY,
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           RW: GH, GM,
                DK, ES,
                         CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      AU 9963259
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               AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                IE, FI
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      WO 1998-DK162
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                            W
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      US 2001-837166
                            Α2
                                  20010419
OS
      MARPAT 132:308142
GΙ
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(CA INDEX NAME)

AΒ Title compds. [I; 1 of R1-R3 = acidic functional group having pKa<8 or a group convertible in vivo to such a group; R4, R5 and the others of R1-R3 = H, alkyl, alkoxy, OH, halo, CF3, cyano, NO2, amino, etc.; Y = C(:X)NR0, NROC(:X)NRO0, etc.; RO, ROO = H, alkyl; X = O, S; R11-R15 = H, alkyl, alkoxy, OH, halo, CF3, cyano, (substituted) aryl, heteroaryl, phenylamino, etc.], were prepd. Thus, 3-trifluoromethylphenyl isocyanate and 2-aminobenzoic acid were stirred in PhMe to give N-3-trifluoromethylphenyl-N'-2-carboxyphenyl urea. N-3-trifluoromethylphenyl-N'-[4'-(dimethylsulfamoyl)-2-(1H-tetrazol-5-yl)-4-biphenyl]urea blocked erythrocyte chloride channels with KD = 0.3 .mu.M. ΙT 1566-81-0P 2164-95-6P 200193-42-6P 265646-51-3P 265646-52-4P 265646-53-5P 265646-54-6P 265646-55-7P 265646-57-9P 265646-59-1P 265646-60-4P 265646-61-5P 265646-62-6P 265646-63-7P 265646-64-8P 265646-65-9P 265646-66-0P 265646-67-1P 265646-68-2P 265646-69-3P 265646-70-6P 265646-71-7P 265646-72-8P 265646-73-9P 265646-74-0P 265646-75-1P 265646-76-2P 265646-77-3P 265646-78-4P 265646-79-5P 265646-80-8P 265646-81-9P 265646-82-0P 265646-83-1P 265646-84-2P 265646-85-3P 265646-86-4P 265646-87-5P 265646-88-6P 265646-89-7P 265646-90-0P 265646-91-1P 265646-92-2P 265646-94-4P 265646-95-5P 265646-96-6P 265646-97-7P 265646-98-8P 265646-99-9P 265647-00-5P 265647-01-6P 265647-02-7P 265647-03-8P 265647-04-9P 265647-07-2P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of diarylureas and related compds. as chloride channel blockers) ΙΤ 265647-06-1P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of diarylureas and related compds. as chloride channel blockers) ΙΤ 1566-81-0P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of diarylureas and related compds. as chloride channel blockers) RN 1566-81-0 HCAPLUS Benzoic acid, 2-[[[[3-(trifluoromethyl)phenyl]amino]carbonyl]amino]- (9CI) CN

GB 1993-14847

US 1993-98178

Α

**A**3

19930716

19930728

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## RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2002 ACS
L74
ΑN
     1999:505666 HCAPLUS
DN
     131:144417
ΤI
     N-(Hetero)aryl-3,4-(cyclo)alkoxybenzamides and analogs useful as
     tumor necrosis factor and c-AMP phosphodiesterase inhibitors
     Fenton, Garry; Morley, Andrew David; Palfreyman, Malcolm Norman;
TN
     Ratcliffe, Andrew James; Harp, Brian William; Thurairatnam, Sukanthini;
     Vacher, Bernard Yvon Jack; Ashton, Michael John; Cook, David Charles;
     Hills, Susan Jacqueline; McFarlane, Ian Michael; Vicker, Nigel
PΑ
     Rhone-Poulenc Rorer Ltd., UK
SO
     U.S., 48 pp.
     CODEN: USXXAM
DT
     Patent
LA
     English
FAN.CNT 3
     PATENT NO.
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                                             APPLICATION NO.
                                                               DATE
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     ZA 9200547
                       Α
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M

US 1995-484805 A3 19950607 <--MARPAT 131:144417

OS GI

Title compds. (I) [R1 = lower alkyl; R2 = (un)substituted cycloalkyl, AB (un) substituted cycloalkenyl, (un) substituted or oxidized cyclothioalkyl, or (un)substituted or oxidized cyclothioalkenyl; R3 = (un)substituted (hetero)aryl; Z, Z1, Z2 = independently O or S; Z3 = C(:Z)NH] and their N-oxides and salts were prepd. for pharmaceutical use as tumor necrosis factor and cAMP phosphodiesterase inhibitors. Thus, 3-cyclopentyloxy-4-methoxybenzoyl chloride (prepn. given) in CH2Cl2 was added dropwise to 2,6-difluoroaniline in triethylamine and CH2Cl2 and refluxed for 4 h to yield N-(2,6-difluorophenyl)-3-cyclopentyloxy-4methoxybenzamide (II). Compds. of the invention were tested for inhibitory effects on PDE activity and eosinophil superoxide generation, effects on tracheal smooth muscle contractility, in vivo bronchodilator actions and antigen(ovalbamin)-induced eosinophilia, in vitro inhibitory effects on TNF-.alpha. release by human monocytes, and inhibitory effects on antigen-induced bronchoconstriction in conscious guinea-pigs and serum TNF-.alpha. levels in LPS-challenged mice. Compds. showed 10,000-fold to 50-fold more selectivity for cAMP phosphodiesterase IV than cyclic nucleotide phosphodiesterase types I, III, or V and have IC50 values ranging from 0.1 nM to 40 .mu.M for PDE activity. At concns. from 5x10-9M to 10-5M, preferably 5x10-9 to 10-7, compds. produced about 50% relaxation of guinea-pig tracheal strips. When administered at EDs of 4 to 1000.mu.g/kg, preferably 4 to 50 .mu.g/kg, compds. produced 30% to 90% decrease in bronchospasm without any significant effect on blood pressure. At oral doses of 1 to 50 mg/kg, preferably 1 to 10 mg/kg, and inhaled doses of 4 to 1000 .mu.g/kg, preferably 4 to 50 .mu.g/kg, compds. inhibited by at least 50% ovalbumin-induced eosinophilia in guinea-pigs. Compds. produced 50% inhibition of LPS-induced TNF-.alpha. release from human PBMs at concns. of 10-9M to 10-6M, preferably 10-9M to 10-8 M. At doses of 1 to 1000 .mu.g/kg (i.t.), preferably 1 to 20 .mu.g/kg (i.t.), compds. inhibited antigen-induced bronchoconstriction by up to 80%. Compds. inhibited LPS-induced serum TNF-.alpha. at doses of 10 to 10,000 .mu.g/kg, preferably 10 to 250 .mu.g/kg. Compds. showed very low mammalian toxicity levels. Twenty-one compns. of the title compds. for gelatin capsules or dry powder inhalers were also prepd. 159782-48-6P, N-(2,6-Dichlorophenyl)-N'-(3-cyclopentyloxy-4-ΙT methoxyphenyl)urea 159782-49-7P, N-(3,5-Dichloropyrid-4-yl)-N'-(3-cyclopentyloxy-4-methoxyphenyl)urea RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of N-(hetero)aryl 3,4-(cyclo)alkoxybenzamides and analogs useful as tumor necrosis factor and c-AMP phosphodiesterase inhibitors) 159782-48-6P, N-(2,6-Dichlorophenyl)-N'-(3-cyclopentyloxy-4-ΙT

methoxyphenyl)urea
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-(hetero)aryl 3,4-(cyclo)alkoxybenzamides and analogs useful as tumor necrosis factor and c-AMP phosphodiesterase inhibitors)

RN 159782-48-6 HCAPLUS

CN Urea, N-[3-(cyclopentyloxy)-4-methoxyphenyl]-N'-(2,6-dichlorophenyl)-(9CI) (CA INDEX NAME)

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L74 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2002 ACS
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AN 1998:612095 HCAPLUS

DN 129:244921

TI Preparation of aromatic sulfonyl alpha-hydroxy hydroxamic acid compounds as matrix metalloprotease inhibitors

IN Freskos, John N.; Boehm, Terri L.; Mischke, Brent V.; Heintz, Robert M.;
Mcdonald, Joseph J.; Decrescenzo, Gary A.; Howard, Susan C.

PA Monsanto Company, USA

SO PCT Int. Appl., 203 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 4

| F'AN. | PATENT NO. |                |      |     | KI          | KIND DATE |          |      |      | APPLICATION NO. |      |      |      |      |          | DATE |     |     |    |
|-------|------------|----------------|------|-----|-------------|-----------|----------|------|------|-----------------|------|------|------|------|----------|------|-----|-----|----|
| ΡI    | WO.        | 9839           | 326  |     | Α.          | <br>1     | 1998     | 0911 |      | W               | 0 19 | 98-U | S427 | 7    | 19980304 |      |     |     |    |
|       |            | W:             | AL,  | ΑU, | BA,         | BB,       | BG,      | BR,  | CA,  | CN,             | CU,  | CZ,  | EE,  | GΕ,  | GH,      | GW,  | HU, | ID, |    |
|       |            |                |      |     |             |           |          |      |      |                 |      |      |      |      | MN,      |      |     |     |    |
|       |            |                | PL,  | RO, | SG,         | SI,       | SK,      | SL,  | TR,  | TT,             | UA,  | US,  | UŻ,  | VN,  | YU,      | AM,  | ΑZ, | BY, |    |
|       |            |                | KG,  | ΚZ, | MD,         | RU,       | ТJ,      | TM   |      |                 |      |      |      |      |          |      |     |     |    |
|       |            | RW:            |      |     |             |           |          |      |      |                 |      |      |      |      | DE,      |      |     |     |    |
|       |            |                | FR,  | GB, | GR,         | IE,       | IT,      | LU,  | MC,  | NL,             | PT,  | SE,  | BF,  | ВJ,  | CF,      | CG,  | CI, | CM, |    |
|       |            |                |      |     |             |           | NE,      |      |      |                 |      |      |      |      |          |      |     |     |    |
|       | ΑU         | 9864           | 478  |     | A1 19980922 |           |          | A    | U 19 | 98-6            | 4478 |      | 1998 | 0304 | <        |      |     |     |    |
|       | ΑU         | 7373           | 29   |     | B           | 2         | 20010816 |      |      |                 |      |      |      |      |          |      |     |     |    |
|       | EΡ         | 9849           |      |     |             |           |          |      |      |                 |      |      |      |      |          |      |     |     |    |
|       |            | R:             | ΑT,  | BE, | CH,         | DĒ,       | DK,      | ES,  | FR,  | GB,             | GR,  | ΙT,  | LI,  | LU,  | NL,      | SE,  | PT, | ΙE, | FΙ |
|       | BR         | 9808           |      |     |             |           |          |      |      |                 |      |      |      |      | 1998     |      |     |     |    |
|       | US         | 6362           | 183  |     | В           | 1         | 2002     | 0326 |      | Ü               | S 19 | 99-2 | 5453 | 5    | 1999     | 0604 | <   |     |    |
| PRAI  | US         | 1997           | -351 | 82P | P           |           | 1997     | 0304 | <-   | -               |      |      |      |      |          |      |     |     |    |
|       | WO         | NO 1998-US4277 |      | W   |             | 1998      | 0304     |      |      |                 |      |      |      |      |          |      |     |     |    |

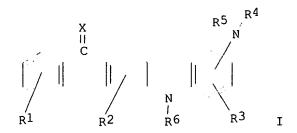
OS MARPAT 129:244921

AB The title compds. HONHC(O)C(OH)(R2)CH2SO2R1 [I; R2 = H, C1-4 alkyl, C1-4 haloalkyl, etc.; R1 = 5-6 membered cycloalkyl, heterocyclyl, aryl, etc.] which inter alia inhibit matrix metalloprotease activity, were prepd. Thus, multi-step synthesis of I [R1 = 4-PhOC6H4; R2 = Me] which showed 51.9% inhibition of angiogenesis in the cornea of a mouse, was described.

IT 213183-96-1P 213184-00-0P 213184-01-1P 213184-03-3P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of arom. sulfonyl alpha-hydroxy hydroxamic acid compds. as matrix metalloprotease inhibitors)



The title compds. I [R1 and R2 stand independently for one or more, AB similar or different substituents selected from the group consisting of hydrogen, halogen, hydroxy, mercapto, trifluoromethyl, amino, alkyl, alkoxy, alkylthio, alkylamino, or alkoxycarbonyl, the C-content of which can be from 1 to 5, cyano, carboxy, carbamoyl, Ph, or nitro; R3 stands for hydrogen, halogen, hydroxy, mercapto, trifluoromethyl, amino, alkyl, alkoxy, alkylthio, alkylamino, or alkoxycarbonyl, the C-content of which can be from 1 to 5, Ph, cyano, carboxy, or carbamoyl; R4, R5 and R6 stand independently for hydrogen, trifluoromethyl, alkyl, carbamoyl, alkoxycarbonyl, or alkyloxo, the C-content of which can be from 1 to 5; X stands for oxygen, NOH, NO-alkyl, dialkoxy, cyclic dialkoxy, dialkylthio, or cyclic dialkylthio, the C-content of which can be from 1 to 5} are prepd. The present compds. are of value in the human and veterinary practice as systemic and topical therapeutic agents for the treatment and prophylaxis of asthma, allergy, rheumatoid arthritis, spondyloarthritis, gout, atherosclerosis, chronic inflammatory bowel disease, proliferative and inflammatory skin disorders, such as psoriasis, and atopic dermatitis. In an in vitro test using human polymorphonuclear granulocytes, 4-(2-aminophenylamino)-2-chloro-2'-methylbenzophenone in vitro showed IC50 of 13 nM and 7.1 nM against the prodn. of Il-1.beta. and TNF-.alpha., resp. In the above test, 4-(2-aminophenylamino)benzophenone (II) in vitro showed IC50 of 250 nM and 790 nM against the prodn. of Il-1.beta. and TNF-.alpha., resp. In the 12-0-tetradecanoylphorbol-13acetate induced murine skin inflammation model, II showed activity equal to hydrocortisone.

IT 210965-94-9P

IT

RN

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of aminobenzophenones as inhibitors of interleukin and TNF) 210965-94-9P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of aminobenzophenones as inhibitors of interleukin and TNF) 210965-94-9 HCAPLUS

CN Urea, N-[2-[(4-benzoylphenyl)amino]phenyl]-N'-phenyl- (9CI) (CA INDEX NAME)

L74 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2002 ACS

AN 1998:430106 HCAPLUS

DN 129:108912

TI Preparation of 3-guanidinophenylamides and related compounds as integrin .alpha.v.beta.3 inhibitors or antagonists.

IN Chandrakumar, Nizal; Chen, Barbara B.; Chen, Helen Y.; Clare, Michael;
 Gasiecki, Alan F.; Haack, Richard A.; Malecha, James W.; Ruminski, Peter
 G.; Russell, Mark A.

PA G. D. Searle & Co., USA

SO U.S., 77 pp.

CODEN: USXXAM DT Patent

LA English

FAN.CNT 1

| <br>PATENT NO.   | KIND | DATE         | APPLICATION NO. | DATE       |
|------------------|------|--------------|-----------------|------------|
|                  |      | <del>-</del> |                 |            |
| US 5773646       | A    | 19980630     | US 1997-825086  | 19970327 < |
| MARPAT 129.10891 | 2    |              |                 |            |

OS GI

PΙ

AB Title compds. [I; A = NR5C(Y1)NR7R8, etc.; Y1 = NR2, O, S; R2 = H, alkyl, aryl, OH, alkoxy, cyano, NO2, amino, aminocarbonyl, alkenyl, alkynyl, (substituted) alkyl, aryl, heterocyclyl; R2R7 = (substituted) heterocyclyl; R7, R8 = H, alkyl, alkenyl, alkynyl, aralkyl, cycloalkyl, bicycloalkyl, aryl, acyl, benzoyl, (substituted) alkyl, heterocyclyl, etc.; NR7R8 = (substituted) mono- or bicyclic heterocyclyl; R5 = H, alkyl, alkenyl, alkynyl, PhCH2, PhCH2CH2; Z1, Z2, Z4, Z5 = H, alkyl, OH, alkoxy, aryloxy, aralkoxy, halo, haloalkyl, haloalkoxy, NO2, amino, aminoalkyl, alkylamino, dialkylamino, cyano, alkylthio, alkylsulfonyl, carboxyl derivs., (fused) aryl; cycloalkyl, (fused) heterocyclyl, A; B = SO2NR5O, CONR5O(CH2)p, CH2O, SOCH2, SO2CH2, etc.; p = 0-2; R5O = H, alkyl; Y = (CHR7O)q, O; q = 0, 1; R7O = H, alkyl, (substituted) aryl; m = 0-2; R = XR3; X = O, S, NR4; R3, R4 = H, alkyl, alkenyl, alkynyl, halolalkyl, aryl, aralkyl, etc.; Y3, Z3 = H, alkyl, aryl, cycloalkyl, aralkyl; R1 = H, alkyl, aryl, etc.], were prepd. Thus, 3-[[[3-[(aminomiminomethyl)amino]phenyl]sulfonyl]amino]-.beta.-phenylbenzenepropanoic acid trifluoroacetate (prepn. given) inhibited vitronectin adhesion with IC50 = 16.7 nM.

IT 197790-95-7P 197790-96-8P 197790-97-9P 197790-98-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 3-guanidinophenylamides and related compds. as integrin inhibitors or antagonists)

197792-61-3P 197792-62-4P 197792-63-5P IT 197792-64-6P 197792-65-7P 197792-66-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of 3-guanidinophenylamides and related compds. as integrin inhibitors or antagonists)

ΙT 197790-95-7P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 3-guanidinophenylamides and related compds. as integrin inhibitors or antagonists)

197790-95-7 HCAPLUS RN

Benzenepropanoic acid, 3-[[[[3-[(aminoiminomethyl)amino]phenyl]amino]carbo CN nyl]amino] - (9CI) (CA INDEX NAME)

L74 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1998:331368 HCAPLUS AN

129:4502 DN

Preparation of guanylhydrazones and their use to treat inflammatory TIconditions

Bianchi, Marina; Cerami, Anthony; Tracey, Kevin J.; Ulrich, Peter ΙN

Picower Institute for Medical Research, USA PΑ

U.S., 44 pp. Cont.-in-part of U.S. 5,599,984. SO CODEN: USXXAM

DT Patent

English LA

DAM CNIM

| FAN. | CNT 3           |      |          |   |                 |            |
|------|-----------------|------|----------|---|-----------------|------------|
|      | PATENT NO.      | KIND | DATE     |   | APPLICATION NO. | DATE       |
|      |                 |      |          |   |                 |            |
| ΡI   | US 5750573      | A    | 19980512 |   | US 1995-463568  | 19950605 < |
|      | US 5599984      | Α    | 19970204 |   | US 1994-315170  | 19940929 < |
|      | US 5753684      | Α    | 19980519 |   | US 1995-471696  | 19950606 < |
|      | US 5849794      | Α    | 19981215 |   | US 1995-472004  | 19950606 < |
|      | US 5859062      | Α    | 19990112 |   | US 1995-471124  | 19950606 < |
|      | US 6008255      | Α    | 19991228 |   | US 1995-471305  | 19950606 < |
|      | US 6022900      | Α    | 20000208 |   | US 1995-471919  | 19950606 < |
|      | US 6180676      | В1   | 20010130 |   | US 1995-472003  | 19950606 < |
|      | US 6248787      | В1   | 20010619 |   | US 1995-479050  | 19950606 < |
|      | US 5854289      | Α    | 19981229 |   | US 1996-632305  | 19960415 < |
|      | US 2002028851   | A1   | 20020307 |   | US 2001-824217  | 20010403 < |
| PRAI | US 1994-184540  | B2   | 19940121 | < |                 |            |
|      | US 1994-315170  | A2   | 19940929 | < |                 |            |
| •    | US 1995-463568  | A3   | 19950605 | < |                 |            |
|      | US 1995-479050  | A1   | 19950606 | < |                 |            |
| os   | MARPAT 129:4502 |      |          |   |                 |            |
| CT   |                 |      |          |   |                 |            |

GI

$$x^1$$
 $x^2$ 
 $x^2$ 
 $x^3$ 
 $x^4$ 
 $x^4$ 

AΒ Arom. guanylhydrazone (more properly termed amidinohydrazone) [I; X2 = GhyCH, GhyCCH3 or H, wherein Ghy = guanylhydrazono; X1, X3 and X4,independently = GhyCH or GhyCCH3; and Z = NH(CO)NH] are prepd. This invention concerns new methods and compns. that are useful in preventing and ameliorating cachexia, the clin. syndrome of poor nutritional status and bodily wasting assocd. with cancer and other chronic diseases. More particularly, the invention relates to compns. contg. amidinohydrazone I and their use to inhibit the uptake of arginine by macrophages and/or its conversion to urea. These compns. and methods are also useful in preventing the generation of nitric oxide (NO) by cells, and so to prevent NO-mediated inflammation and other responses in persons in need of same. In another embodiment, the compds. I can be used to inhibit arginine uptake in arginine-dependent tumors and infections. Thus, N,N'-bis(3,5-diacetylphenyl)decanediamide, aminoguanidine hydrochloride, and aminoguanidine dihydrochloride were heated in 91% ethanol for 18 h to give the title compd. (II). II was the most active compd. in vitro for inhibiting urea prodn. in RAW 264.7 cell with IC50 of 1 .mu.M.

IT 15427-75-5P 169764-82-3P 169765-12-2P 169765-13-3P 187959-61-1P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of guanylhydrazones for treating NO- or arginine-mediated diseases such as inflammatory conditions)  $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left( \frac{1}{2} \right)$ 

IT 169765-14-4P 169765-32-6P 169765-36-0P 169765-37-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of guanylhydrazones for treating NO- or arginine-mediated diseases such as inflammatory conditions)

IT 15427-75-5P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of guanylhydrazones for treating NO- or arginine-mediated diseases such as inflammatory conditions)

RN 15427-75-5 HCAPLUS

CN Hydrazinecarboximidamide, 2,2'-[carbonylbis(imino-4,1-phenyleneethylidyne)]bis-, dihydrochloride (9CI) (CA INDEX NAME)

## ●2 HCl

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ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2002 ACS
L74
     1997:805714 HCAPLUS
ΑN
DN
     128:61354
ΤI
     Preparation of arylureas and related compounds as chloride channel
     blockers.
     Christophersen, Palle; Pedersen, Ove
IN
     Neurosearch A/S, Den.; Christophersen, Palle; Pedersen, Ove
PΑ
SO
     PCT Int. Appl., 36 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 4
                        KIND
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                                               APPLICATION NO.
                                                                  DATE
     PATENT NO.
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PΙ
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              PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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                      NE, SN, TD, TG
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                                               EP 1997-924019
                                                                  19970526 <--
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os
     MARPAT 128:61354
GΙ
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$$R^{12}$$
 $R^{11}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{14}$ 
 $R^{15}$ 
 $R^{5}$ 
 $R^{4}$ 
 $R^{4}$ 
 $R^{15}$ 

AB Title compds. [I; 1 of R1, R2, R3 = non-cyclic acidic group having a pKa

value <8 or a group in vivo convertible thereto; R4, R5, and the other 2 of R1, R2, R3 = H, alkyl, cycloalkyl, cycloalkylalkyl, alkenyl, alkynyl, alkoxy, hydroxy, halo, CF3, OCF3, cyano, NO2, amino, (substituted) aryl, aralkyl, arylamino, aryloxy, arylcarbonyl, heteroaryl; R3R4 or R4R5 = (unsatd.) fused 4-7 membered carbocyclic ring; X = NH, CH2NH, SO2NH; Y = CO, CS, SO2, C(:NR8); R8 = H, alkyl, cyano; X = NH, CH2NH, SO2NH; Z = NR6, O, CH:CH, C.tplbond.C, N:CH, CH:N; R6 = H, alkyl; R11-R15 = H, alkyl, cycloalkyl, cycloalkylalkyl, alkenyl, alkynyl, alkoxy, OH halo, CF3, OCF3, cyano, NO2, amino, NHSO2R7, CO2R7, SO2N(R7)2, SO2OR7, etc.], were prepd. Thus, 3-trifluoromethylphenyl isocyanate and 2-aminobenzoic acid were kept in toluene to give N-(3-trifluoromethylphenyl)-N'-(2-carboxyphenyl)urea. The latter at 10 .mu.M normalized the basal K+ flux from sickle erythrocytes and nearly abolished the deoxygenation induced flux component. 1566-81-0P 1566-82-1P 1566-85-4P 1566-86-5P 1566-88-7P 1566-98-9P

IT 1566-81-0P 1566-82-1P 1566-85-4P
1566-86-5P 1566-88-7P 1566-98-9P
54506-39-7P 160384-12-3P 160384-14-5P
160384-23-6P 182958-17-4P 195133-45-0P
200193-39-1P 200193-40-4P 200193-41-5P
200193-42-6P 200193-43-7P 200193-44-8P
200193-45-9P 200193-46-0P 200193-47-1P
200193-48-2P 200193-49-3P 200193-50-6P
200193-52-8P 200193-53-9P 200193-56-2P
200193-57-3P 200193-58-4P 200193-59-5P
200193-60-8P 200193-65-3P
RL: BAC (Biological activity or effector, except

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of arylureas and related compds. as chloride channel blockers) 200193-72-2

RL: RCT (Reactant)

IT

ΙT

IΤ

(prepn. of arylureas and related compds. as chloride channel blockers) 200193-73-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of arylureas and related compds. as chloride channel blockers) 1566-81-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of arylureas and related compds. as chloride channel blockers) 1566-81-0 HCAPLUS

RN 1566-81-0 HCAPLUS
CN Benzoic acid, 2-[[[[3-(trifluoromethyl)phenyl]amino]carbonyl]amino]- (9CI)
(CA INDEX NAME)

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L74 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2002 ACS
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AN 1997:679052 HCAPLUS

DN 127:318772

TI Preparation of meta-substituted phenylene derivatives and their use as .alpha.v.beta.3 integrin antagonists or inhibitors

IN Chandrakumar, Nizal; Chen, Barbara B.; Chen, Helen; Clare, Michael; Gasiecki, Alan F.; Haack, Richard A.; Malecha, James W.; et al.

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G.D. Searle & Co., USA; Chandrakumar, Nizal; Chen, Barbara B.; Chen,
PA
     Helen; Clare, Michael; Gasiecki, Alan F.
SO
     PCT Int. Appl., 306 pp.
    CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
     PATENT NO.
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             PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ,
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                       A1
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        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
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                            20010915
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    ES 2162676
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PRAI US 1996-14464P
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                            19970326
    WO 1997-US4461
                                     <--
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A-
$$(CY^3Z^3)_m$$
 B Y-CHR<sup>1</sup>COR

 $Z^1$   $Z^2$   $Z^4$   $Z^5$  I

R<sup>10</sup>NH SO<sub>2</sub>NH CHCH<sub>2</sub>CO<sub>2</sub>H

MARPAT 127:318772

OS GI

AB The present invention relates to a class of compds., i.e, phenylalkanoic acid and phenoxyacetic acid derivs., represented by formula [I; A =

II

(un) substituted NHC(:NH)NH, NHCONH, NHC(:S)NH, or NHCH:NH, C(:NH)NH2, C(:NOH)NH2; Z1 - Z5 = H, alkyl, OH, alkoxy, aryloxy, aralkoxy, halo, haloalkyl, haloalkoxy, NO2, NH2, aminoalkyl, alkylamino, dialkylamino, cyano, etc.; B = N-(un)substituted CONH(CH2)p or SO2NH, NHCONH(CH2)p, CO2(CH2)p, CH2CH2, alkenylene or alkynylene optionally substituted by oxo, CH2O, SCH2, SOCH2, SO2 CH2, CH(OH)CH2O, CH:CHCO; wherein p = 0, 1,2; Y =(un) substituted (CH2) q, O; q = 0,1; m = 0, 1,2; R = X-R3; wherein X = 0, S, (un) substituted NH; R3 = H, alkyl, alkenyl, alkynyl, haloalkyl, aryl, aralkyl, sugar or steroid residue; Y3, Z3 = H, alkyl, aryl, cycloalkyl, aralkyl; R1 = H, alkyl, aryl, NHCOR51, NHCO2R12, NHCOR12, NHSO2R12, NHCONHR12; wherein R12 = H, alkyl, cycloalkyl, aralkyl, aryl; R51 = N-substituted pyrrolidinyl, piperidinyl, or morpholinyl] or pharmaceutically acceptable salts thereof are prepd. Also claimed are pharmaceutical compns. comprising above compds. I and methods of selectively inhibiting or antagonizing .alpha.v.beta.3 integrin. A method for treating conditions mediated by .alpha.v.beta.3 integrin, e.g. tumor metastasis, solid tumor growth, angiogenesis, osteoporosis, humoral hypercalcemia of malignancy, smooth muscle cell migration, restenosis, in a mammal comprises administering an effective .alpha.v.beta.3 integrin-inhibiting amt. of above compds. I. Thus, 3-(3-aminobenzenesulfonamido)-3-phenylpropanoic acid deriv. (II; R10 = H) was condensed with N, N'-bis(tert-butoxycarbonyl)-2-(1H)-tetrahydropyrimidinethione followed by deprotection to give II (R10 = Q), which showed IC50 of 0.75 nM for 50% inhibition of the max. binding of biotinylated vitronectin to human vitronectin receptor (.alpha.v.beta.3) purified from human placenta (Niiya et al., Blood,

IT 197790-95-7P 197790-96-8P 197790-97-9P 197790-98-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of meta-substituted phenylene derivs. and their use as .alpha.v.beta.3 integrin antagonists or inhibitors for disease treatment)

IT 197792-61-3P 197792-62-4P 197792-63-5P 197792-64-6P 197792-65-7P 197792-66-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of meta-substituted phenylene derivs. and their use as .alpha.v.beta.3 integrin antagonists or inhibitors for disease treatment)

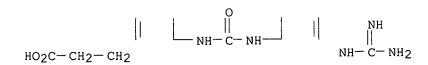
IT 197790-95-7P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of meta-substituted phenylene derivs. and their use as .alpha.v.beta.3 integrin antagonists or inhibitors for disease treatment)

RN 197790-95-7 HCAPLUS

CN Benzenepropanoic acid, 3-[[[[3-[(aminoiminomethyl)amino]phenyl]amino]carbo nyl]amino]- (9CI) (CA INDEX NAME)



L74 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:679049 HCAPLUS

DN 127:346198

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TI Para-substituted phenylpropanoic acid derivatives prepared as integrin antagonists
```

IN Chen, Barbara B.; Chen, Helen Y.; Gesicki, Glen J.; Haack, Richard A.; Malecha, James W.; Penning, Thomas D.; Rico, Joseph G.; Rogers, Thomas E.; et al.

PA G.D. Searle & Co., USA; Chen, Barbara B.; Chen, Helen Y.; Gesicki, Glen J.; Haack, Richard A.; Malecha, James W.; Penning, Thomas D.

SO PCT Int. Appl., 359 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|      |     | rent ' |      |      |       |     |      |      |     |     |      |      |       | ٥.  | DATE |      |     |     |    |
|------|-----|--------|------|------|-------|-----|------|------|-----|-----|------|------|-------|-----|------|------|-----|-----|----|
| ΡI   |     | 9736   |      |      | <br>A |     | 1997 |      |     |     |      | 97-U |       | 0   | 1997 | 0326 | <   |     |    |
|      |     | W:     | AL,  | AM,  | AT,   | AU, | ΑZ,  | BA,  | BB, | BG, | BR,  | BY,  | CA,   | CH, | CN,  | CU,  | CZ, | DE, |    |
|      |     |        | DK,  | EE,  | ES,   | FI, | GB,  | GE,  | GH, | HU, | IL,  | IS,  | JP,   | ΚE, | KG,  | ΚP,  | KR, | ΚZ, |    |
|      |     |        | LC,  | LK,  | LR,   | LS, | LT,  | LU,  | LV, | MD, | MG,  | MK,  | MN,   | MW, | MX,  | NO,  | ΝZ, | PL, |    |
|      |     |        | PT,  | RO,  | RU,   | SD, | SE,  | SG,  | SI, | SK, | TJ,  | TM,  | TR,   | TT, | UA,  | UG,  | US, | UZ, |    |
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|      | CA  | 2250   | 698  |      | A     | Ą   | 1997 | 1009 |     | C.  | A 19 | 97-2 | 2506  | 98  | 1997 | 0326 | <   |     |    |
|      |     | 9725   |      |      |       |     |      |      |     |     |      |      |       |     | 1997 | 0326 | <   |     |    |
|      |     | 8913   |      |      |       |     |      |      |     | E   | P 19 | 97-9 | 1685  | 2   | 1997 | 0326 | <   |     |    |
|      | ĒΡ  | 8913   | 25   |      | B     | 1   | 2002 | 0206 |     |     |      |      |       |     |      |      |     |     |    |
|      |     | R:     | ΑT,  | BE,  | CH,   | DE, | DK,  | ES,  | FR, | GB, | GR,  | IT,  | LI,   | LU, | NL,  | SE,  | PT, | ΙE, | FI |
|      | JΡ  | 2000   | 5154 | 93   | T     | 2   | 2000 | 1121 |     | J   | P 19 | 97-5 | 3530  | 8   | 1997 | 0326 | <   |     |    |
|      | ΕP  | 1157   | 985  |      | A.    | 1   | 2001 | 1128 |     | Ε   | P 20 | 01-1 | 1425  | 6   | 1997 | 0326 | <   |     |    |
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|      | US  | 5952   | 381  |      | Α     |     | 1999 | 0914 |     | U   | S 19 | 97-8 | 2624  | 4   | 1997 | 0327 | <   |     |    |
|      | US  | 6251   | 944  |      | B     | 1.  | 2001 | 0626 |     | U   | S 19 | 99-2 | 8874: | 2   | 1999 | 0408 | <   |     |    |
| PRAI | US  | 1996   | -142 | 88P  | P     |     | 1996 | 0329 | <   | -   |      |      |       |     |      |      |     |     |    |
|      | ΕP  | 1997   | -916 | 852  | A.    | 3   | 1997 | 0326 | <   | -   |      |      |       |     |      |      |     |     |    |
|      | WO  | 1997   | -US4 | 460  | W     |     | 1997 | 0326 | <   | -   |      |      |       |     |      |      |     |     |    |
|      | US  | 1997   | -826 | 244  | A.    | 3   | 1997 | 0327 | <   | -   |      |      |       |     |      |      |     |     |    |
| os   | MAI | RPAT   | 127: | 3461 | 98    |     |      |      |     |     |      |      |       |     |      |      |     |     |    |
| GI   |     |        |      |      |       |     |      |      |     |     |      |      |       |     |      |      |     |     |    |

AB The present prepn. relates to a class of racemic, L-, or D-compds. [I; A = O, S, NH, NOH, NR; R = H, OH, alkyl, aryl, nitro, amino; B = CH2CONH, COO, SO2NH, CH2O, OCH2; Z = bond, NR; Y = O, S, SO2; X = O, S, N; n = 0-2; etc.] or a pharmaceutically acceptable salt thereof, which offers treatment of disease states, including angiogenesis (no data).

IT 198150-78-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (4-substituted phenylpropanoic acid derivs. prepd. as integrin antagonists)

IT 198150-77-5P 198152-76-0P 198152-77-1P 198152-78-2P 198152-79-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(4-substituted phenylpropanoic acid derivs. prepd. as integrin antagonists)

ΙT 198150-78-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(4-substituted phenylpropanoic acid derivs. prepd. as integrin

antagonists)

198150-78-6 HCAPLUS RN

Phenylalanine, N-acetyl-4-[[[[3-[(aminoiminomethyl)amino]phenyl]amino]carb CN onyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 198150-77-5 CMF C19 H22 N6 O4

CM 2

CRN 76-05-1 CMF C2 H F3 O2

ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2002 ACS L74

ΑN 1997:124926 HCAPLUS

DN 126:211914

Preparation of arylamidinohydrazones for treatment of cachexia and nitric TΙ oxide-mediated diseases.

Bianchi, Marina; Cerami, Anthony; Tracey, Kevin J.; Ulrich, Peter IN

PΑ

Picower Institute for Medical Research, USA U.S., 42 pp. Cont.-in-part of U.S. Ser. No. 184,540, abandoned. SO CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

| T LILY | CIVI | 9      |     |     |     |     |      |      |     |     |      |      |      |     |      |      |     |     |
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| ΡI     | US   | 5599   | 984 |     | Α   |     | 1997 | 0204 |     | U   | S 19 | 94-3 | 1517 | 0   | 1994 | 0929 | <   |     |
|        | CA   | 2181   | 689 |     | A   | Ą   | 1995 | 0727 |     | C.  | A 19 | 95-2 | 1816 | B 9 | 1995 | 0119 | <   |     |
|        | WO   | 9519   | 767 |     | A.  | 1   | 1995 | 0727 |     | W   | 0 19 | 95-U | S828 |     | 1995 | 0119 | <   |     |
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     US 6180676
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                                             US 1995-479050
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                             20010619
                                             US 1996-632305
                                                               19960415 <--
     US 5854289
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                             19981229
                                                               20010403 <--
                                             US 2001-824217
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                        A1
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                        B2
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                             19940929
     US 1994-315170
                        Α
                                       <--
                        A3
                             19950119
                                       <--
     EP 1995-910110
     WO 1995-US828
                        W
                             19950119
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                        A3
                             19950605
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     US 1995-463568
                        A1
                             19950606
                                       <--
     US 1995-479050
     MARPAT 126:211914
OS
GI
```

$$x^{1}$$
 $x^{2}$ 
 $x^{21}$ 

Title compds., e.g. [I; X2 = H, Q1, Q2; X1, X11, X21 = Q1, Q2; Z = NHCONH, C6H4, C5NH3, A(CH2)nA; n = 2-10; A = NHCO, NHCONH, NH, O; Q1 = H2N(CNH)NHN:CH, H2N(CNH)NHN:CMe], were prepd. Thus, N,N'-bis(3,5-diacetylphenyl)decanediamide (prepn. given), aminoguanidine hydrochloride, and aminoguanidine dihydrochloride were heated in EtOH for 18 h to give N,N'-bis(3,5-diacetylphenyl)decanediamide tetrakis(amidinohydrazone) tetrahydrochloride. The latter at 200 .mu.M gave 100% inhibition of urea prodn., NO2/NO3 prodn., and argine transport in activated macrophages.

IT 169764-82-3P 169765-12-2P 169765-13-3P 187959-61-1P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of arylamidinohydrazones for treatment of cachexia and nitric oxide-mediated diseases)

IT 169765-14-4P 169765-32-6P 169765-36-0P 169765-37-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of arylamidinohydrazones for treatment of cachexia and nitric oxide-mediated diseases)

IT 169764-82-3P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of arylamidinohydrazones for treatment of cachexia and nitric oxide-mediated diseases)

RN 169764-82-3 HCAPLUS

CN Hydrazinecarboximidamide, 2,2'-[[5-[[[4-[1-[(aminoiminomethyl)hydrazono]e thyl]phenyl]amino]carbonyl]amino]-1,3-phenylene]diethylidyne]bis-, trihydrochloride (9CI) (CA INDEX NAME)

●3 HCl

```
L74 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2002 ACS
     1995:662389 HCAPLUS
AN
     123:55495
DN
     Preparation of ureiodobenzoylguanidines as sodium-proton antiporter
ΤI
     inhibitors
     Schwark, Jan-Robert; Lang, Hans-Jochen; Kleemann, Heinz-Werner; Weichert,
IN
     Andreas; Scholz, Wolfgang; Albus, Udo
     Hoechst A.-G., Germany
PΑ
SO
     Eur. Pat. Appl., 17 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     German
FAN.CNT 1
                                           APPLICATION NO.
                                                           DATE
     PATENT NO.
                     KIND DATE
```

| PI   |     | 638548<br>638548 |         |          |      | EP 1994-112383 19940808 <          |  |
|------|-----|------------------|---------|----------|------|------------------------------------|--|
|      | LP  |                  |         |          | FR ( | GB, GR, IE, IT, LI, LU, NL, PT, SE |  |
|      | DE  | 4327244          |         | 19950216 |      |                                    |  |
|      |     |                  | A1      |          |      |                                    |  |
|      |     | 388753           |         |          |      | TW 1994-83106270 19940711 <        |  |
|      | AT  | 165342           | ${f E}$ | 19980515 |      |                                    |  |
|      | ES  | 2115115          | Т3      | 19980616 |      | ES 1994-112383 19940808 <          |  |
|      | FI  | 9403716          | A       | 19950214 |      | FI 1994-3716 19940811 <            |  |
|      | ΑU  | 9470223          | A1      | 19950223 |      | AU 1994-70223 19940811 <           |  |
|      | ΑU  | 683273           | B2      | 19971106 |      |                                    |  |
|      | CN  | 1111618          | А       | 19951115 |      | CN 1994-109503 19940811 <          |  |
|      | CN  | 1060763          | В       | 20010117 |      |                                    |  |
|      | US  | 5559153          | А       | 19960924 |      | US 1994-289674 19940811 <          |  |
|      | IL  | 110625           | A1      | 19990312 |      | IL 1994-110625 19940811 <          |  |
|      | CA  | 2130031          | AA      | 19950214 |      | CA 1994-2130031 19940812 <         |  |
|      | NO  | 9402985          | А       | 19950214 |      | NO 1994-2985 19940812 <            |  |
|      | JΡ  | 07076566         | A2      | 19950320 |      | JP 1994-189725 19940812 <          |  |
|      | ZΑ  | 9406074          | Α       | 19950320 |      | ZA 1994-6074 19940812 <            |  |
|      | HU  | 71816            | A2      | 19960228 |      | HU 1994-2346 19940812 <            |  |
|      | ΗU  | 217628           | В       | 20000328 |      |                                    |  |
| PRAI | DE  | 1993-43272       | 44 A    | 19930813 | <    | -                                  |  |
| os   | MAI | RPAT 123:55      | 495     |          | ٠.   |                                    |  |

AB Title compds. [I; 1 of R1,R3,R4 = NR6C(:X)NR7R8 and the others = H, halo, alk(en)yl(oxy), etc.; R6-R8 = H, (perfluoro)alkyl, alkenyl, etc.] were prepd. Thus, 5-chloroisatoic anhydride was condensed with N-trimethylsilylpiperidine and the product condensed with (H2N)2C:NH to give I (R1 = piperidinocarbonylamino, R2 = R3 = R5 = H, R4 = C1) which had IC50 of 1-2.mu.M against rabbit erythrocyte Na+/H+-exchangers in vitro.

IT 164653-11-6P 164653-17-2P 164653-23-0P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
PREP (Preparation); USES (Uses)

(prepn. of ureiodobenzoylguanidines as sodium-proton antiporter inhibitors)

IT 164653-32-1P 164653-36-5P 164653-41-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of ureiodobenzoylguanidines as sodium-proton antiporter inhibitors)

IT 164653-11-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of ureiodobenzoylguanidines as sodium-proton antiporter inhibitors)

RN 164653-11-6 HCAPLUS

CN Benzamide, N-(aminoiminomethyl)-3-[[(phenylamino)carbonyl]amino]-,
 monohydrochloride (9CI) (CA INDEX NAME)

● HCl

L74 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2002 ACS

AN 1987:477448 HCAPLUS

DN 107:77448

TI Preparation of isophthalonitrile derivatives as agricultural bactericides

IN Ishikawa, Nobuo; Motoyoshi, Masatoshi

PA SDS Biotech Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 62081361 A2 19870414 JP 1985-220167 19851004 <--

OS CASREACT 107:77448

GI

AB The title compds. I [X = Cl, F; R1, R2, R3 = H, alkyl, (un)substituted Ph], useful as agricultural antimicrobial agents, are prepd. A soln. of 2.00 g tetrafluoroisophthalonitrile and 1.11 g H2NCONHMe in 1,4-dioxane was refluxed for 12 h to give 80.7% I (R1 = Me; R2 = R3 = H; X = F), whose MIC (ppm) against Penicillium funiculosum, Aspergillus niger, Fusarium proliferatum, Gliocladium virens, and Rhizopus stolonifer are 50, 50, 50, 100, and 50, resp., vs. 5, 5, 500, >500, and 500 ppm for chlorothalonil.

IT 102-07-8

RL: RCT (Reactant)

(arylation of, with tetrafluoroisophthalonitrile)

IT 109678-91-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as agricultural bactericide and fungicide)

IT 102-07-8

RL: RCT (Reactant)

(arylation of, with tetrafluoroisophthalonitrile)

RN 102-07-8 HCAPLUS

CN Urea, N, N'-diphenyl- (9CI) (CA INDEX NAME)

Ι

L74 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2002 ACS

AN 1986:626077 HCAPLUS

DN 105:226077

TI Benzoylurea compounds and antitumor compositions containing them

IN Haga, Takahiro; Yamada, Nobutoshi; Sugi, Hideo; Koyanagi, Toru; Kondo, Nobuo; Nakajima, Tsunetaka; Watanabe, Masahiro; Yokoyama, Kazumasa

PA Ishihara Sangyo Kaisha, Ltd., Japan

SO Eur. Pat. Appl., 32 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 3

| r AIV. | PATENT NO. | KIND   | DATE          | APPLICATION NO. | DATE       |
|--------|------------|--------|---------------|-----------------|------------|
|        |            |        |               |                 |            |
| ΡI     | EP 192235  | A1     | 19860827      | EP 1986-102063  | 19860218 < |
|        | EP 192235  | B1     | 19891123      |                 |            |
|        | R: BE, CH, | DE, FR | , GB, IT, LI, | NL, SE          |            |

|      | JP  | 61191623        | A2 | 19860826 |   | JР | 1985-32365   | 19850220 | < |
|------|-----|-----------------|----|----------|---|----|--------------|----------|---|
|      | JP  | 61205257        | A2 | 19860911 |   | JP | 1985-44737   | 19850308 | < |
|      | JΡ  | 01056065        | B4 | 19891128 |   |    |              |          |   |
|      | US  | 4727077         | A  | 19880223 |   | US | 1986-823521  | 19860129 | < |
|      | US  | 4849425         | A  | 19890718 |   | US | 1986-824088  | 19860130 | < |
|      | ZA  | 8600775         | Α  | 19861029 |   | ZA | 1986-775     | 19860203 | < |
|      | GB  | 2171695         | A1 | 19860903 |   | GB | 1986-2792    | 19860205 | < |
|      | GB  | 2171695         | B2 | 19890105 |   |    |              |          |   |
|      | ΑU  | 8653285         | A1 | 19860911 |   | ΑU | 1986-53285   | 19860206 | < |
|      | ΑU  | 593233          | В2 | 19900208 |   |    |              |          |   |
|      | CA  | 1266473         | A1 | 19900306 |   | CA | 1986-501576  | 19860211 | < |
|      | CA  | 1260396         | A1 | 19890926 |   | CA | 1986-501662  | 19860212 | < |
|      | FR  | 2577551         | A1 | 19860822 |   | FR | 1986-2147    | 19860218 | < |
|      | FR  | 2577551         | В1 | 19880415 |   |    |              |          |   |
|      | DD  | 243025          | A5 | 19870218 |   | DD | 1986-287134  | 19860218 | < |
|      | CH  | 671576          | Α  | 19890915 |   | CH | 1986-642     | 19860218 | < |
|      | CN  | 86101087        | Α  | 19870225 |   | CN | 1986-101087  | 19860219 | < |
|      | CN  | 1013196         | В  | 19910717 |   |    |              |          |   |
|      | ES  | 552191          | A1 | 19870801 |   | ES | 1986-552191  | 19860219 | < |
|      | SU  | 1500156         | A3 | 19890807 |   | SU | 1986-4023808 | 19860219 | < |
|      | DK  | 8600802         | Α  | 19860821 |   | DK | 1986-802     | 19860220 | < |
|      | DK  | 163124          | В  | 19920120 |   |    |              |          |   |
|      | DK  | 163124          | С  | 19920609 |   |    |              |          |   |
|      | BR  | 8603945         | Α  | 19880517 |   | BR | 1986-3945    | 19860819 | < |
| PRAI | JΡ  | 1985-32365      |    | 19850220 | < |    |              |          |   |
|      |     | 1985-44737      |    | 19850308 | < |    |              |          |   |
| OS   | CAS | SREACT 105:2260 | 77 |          |   |    |              |          |   |
| GI   |     |                 |    |          |   |    |              |          |   |

Title compds. I (R = Br, Cl) were prepd. as antitumor agents. Thus, 5-bromo-2-chloropyrimidine and 2,4-Cl(H2N)C6H3OH were condensed in Me2SO contg. K2CO3 to give pyrimidinyloxyaniline II, which was treated with 2-O2NC6H4CONCO to give I (R = Br) (III). I (R = Cl) (IV) was similarly prepd., and III was also prepd. by 2 other methods. Against leukemia P-388 in mice, III and IV showed i.p. activity inferior or comparable to the known compd. I (R = iodo), but showed markedly superior oral activity. A liposomal formulation was prepd. from III 5, yolk phospholipid 2, .alpha.-tocopherol 0.001, and physiol. saline 92.999 wt. parts.

IT 105355-39-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and condensation of, with bromochloropyrimidine)

IT 105355-39-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and condensation of, with bromochloropyrimidine)

105355-39-3 HCAPLUS

ŔN

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Urea, N-(3-chloro-4-hydroxyphenyl)-N'-(2-nitrophenyl)- (9CI) (CA INDEX
CN
     NAME)
           0||
       NH-C-
                          OH
  NO2
                    Cl
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L2
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L3
          23424 S L2 NOT L3
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              1 S 144378-33-6
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L7
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L8
             17 S KINASE PHOSPHORYLATING GENE C RAF PROTEIN
L9
L10
            574 S L7-L9
              7 S L5 AND L10
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L13
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              1 S L5 AND L13
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              7 S L11, L14
L15
           6950 S L5 AND (PY<=1997 OR PRY<=1997 OR AY<=1997)
L16
              5 S L15 AND L16
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            197 S E3, E4 AND L5
L18
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L19
            930 S E3-E36
                E MILLER SCOTT/AU
            222 S E3-E26
L20
                E OSTERHOUT M/AU
             34 S E3-E5, E7-E9
L21
                E DUMAS J/AU
            458 S E3-E16
L22
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E KHIRE U/AU

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L23
             24 S E4-E6
                E LOWINGER T/AU
             23 S E4-E6
L24
                 E RIEDL B/AU
             84 S E3, E7
L25
                E SCOTT W/AU
            155 S E3, E22-E27
L26
                E SCOTT WILL/AU
L27
            153 S E3, E34-E39
                E SMITH R/AU
            992 S E3-E15
L28
                E SMITH ROGER/AU
            219 S E3-E7
L29
                E WOOD J/ AU
L30
            178 S E3, E16-E20
                E WOOD JILL/AU
             14 S E3-E5
T.31
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L33
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                 E WANG M/AU
L34
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                E WANG MING/AU
           2083 S WANG MING?/AU
L35
                E TURNER T/AU
            358 S E3-E23
L36
                E TURNER TIFFANY/AU
              1 S E3
L37
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             18 S L5 AND L19-L38
             10 S L16 AND L39
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L41
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L42
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              2 S RODRIGUEZ M?/AU AND L5
L43
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L45
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L46
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L47
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L48
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          23094 S L4 NOT L49
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L51
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                 E E5+ALL
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L58
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            91 S L58 AND US/PC
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L61
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L65
             8 S L65 AND L60
L66
L67
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L68
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L69
L70
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             16 S L68 AND L56
L71
             13 S L68 AND L63
L72
            15 S L69 AND L70-L72
L73
L74
            15 S L70-L73 NOT L67
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Creation date: 04-22-2004

Indexing Officer: JACKERMANWILSON - JEAN ACKERMAN-WILSON

Team: OIPEBackFileIndexing

Dossier: 09776936

Legal Date: 05-07-2002

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| 1   | SRNT    | 4               |

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